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A MONTHLY JOURNAL DEVOTED TO THE ELEVATOR AND GRAIN INTERESTS.

PUBLISHED BY
MITCHELL BROS. COMPANY,
(INCORPORATED.)

VOL. XII.

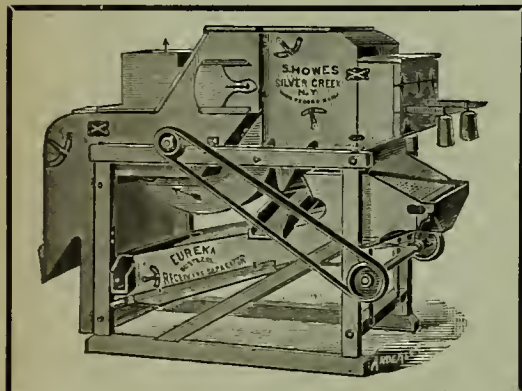
CHICAGO, ILLINOIS, MARCH 15, 1894.

No. 9.

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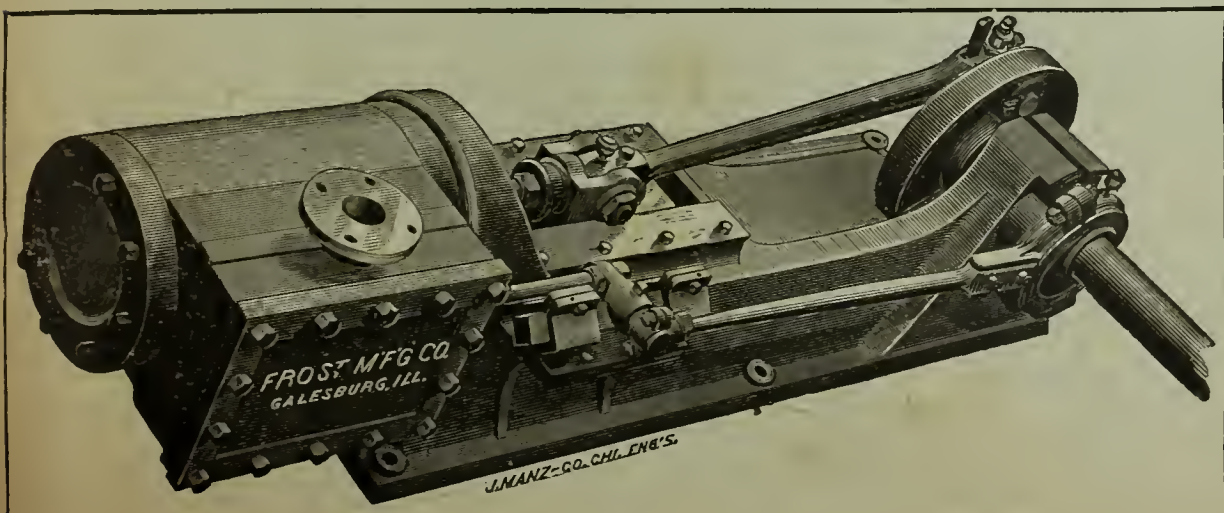


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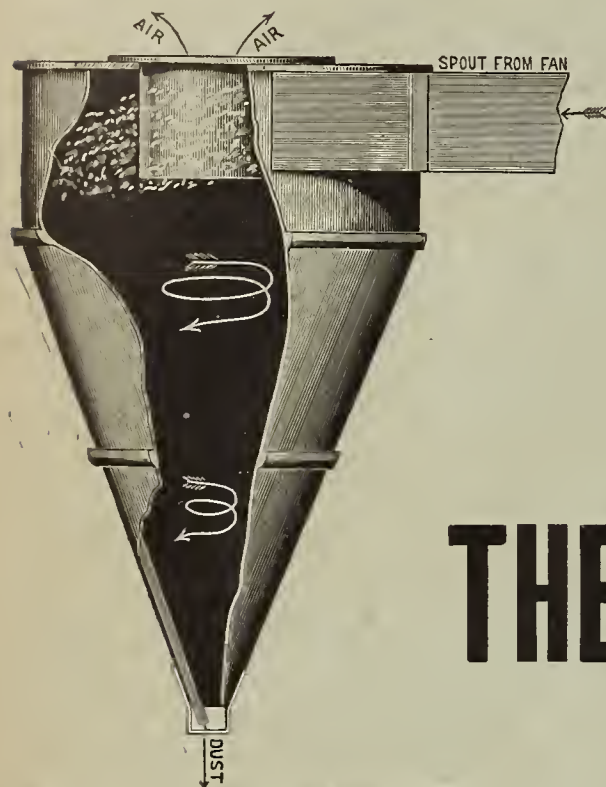
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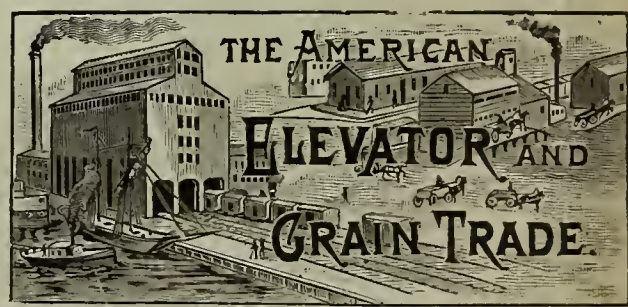
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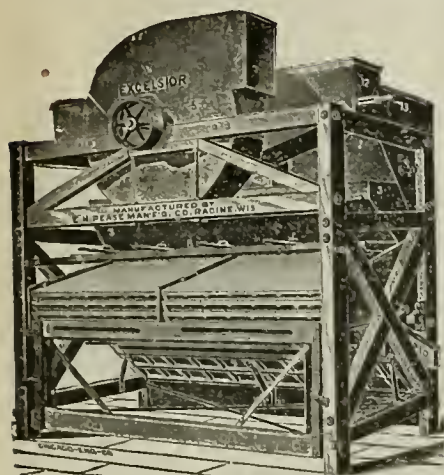
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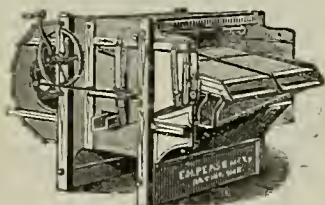
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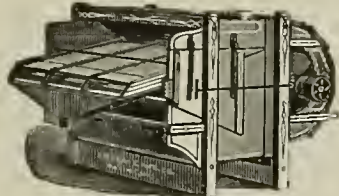
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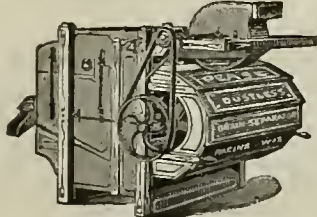
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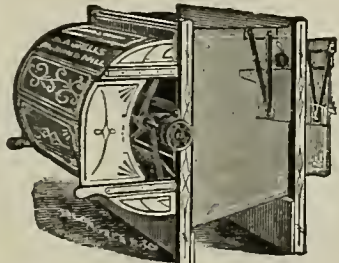
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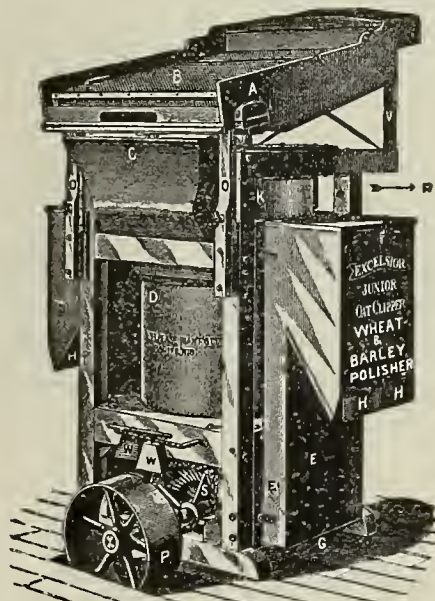
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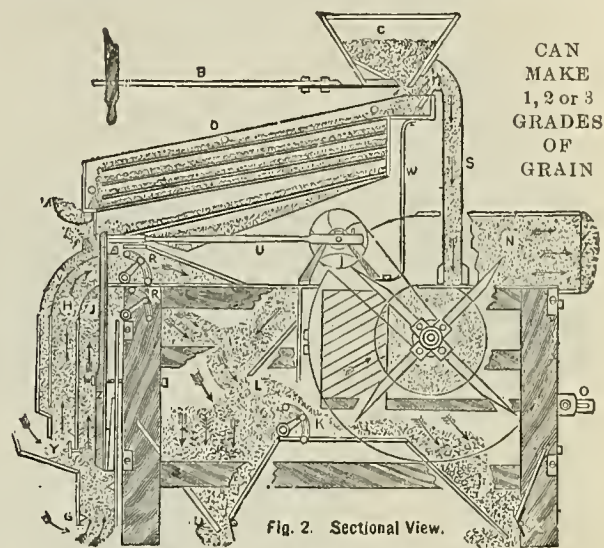


Fig. 2. Sectional View.

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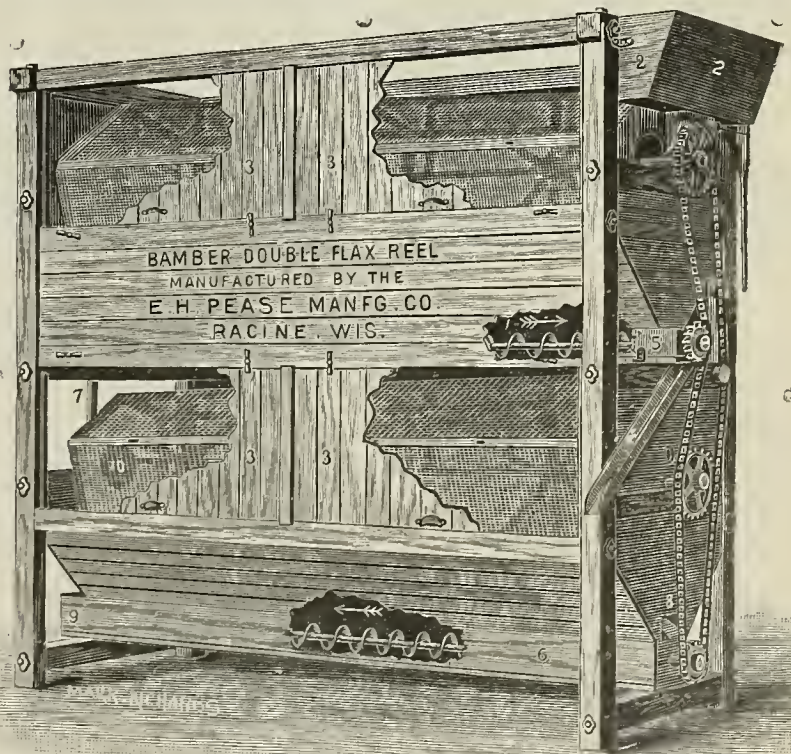
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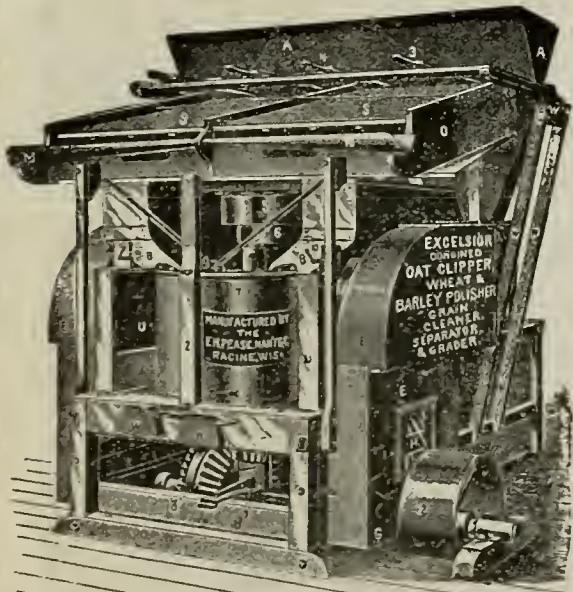


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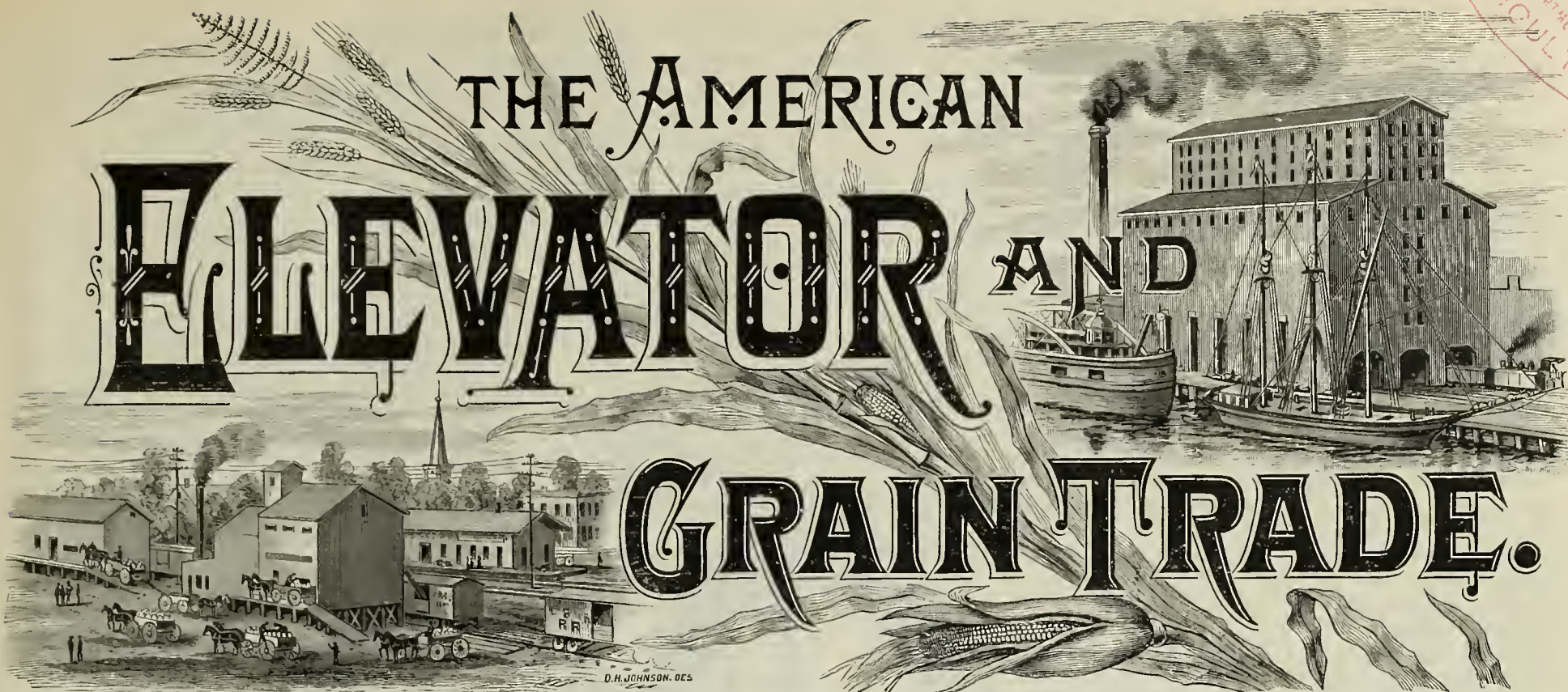
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SUBSCRIPTION PRICE,
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THE SUCCESSFUL GUESSER.

We present herewith a portrait of Ed. Lee, the winner of the prize offered by the AMERICAN ELEVATOR AND GRAIN TRADE for the guess nearest to the amount of grain exported by the United States during the month of January.

According to the February report of the Bureau of Statistics the amount of wheat exported during the month of January was 5,940,136 bushels. During the month of January, 1893, the amount exported was 8,762,438 bushels. The guess that was nearest the amount exported was received from Ed. Lee of Jonesboro, Ill. It registered 5,974,643 bushels. This was 34,507 in excess of the correct number, but nearer by 25,357 bushels than the second best guess. The prize of \$50 was awarded to Ed. Lee.

The majority of the guesses received ranged from 3,000,000 to 9,000,000 bushels. The lowest guess recorded was 1,019,119 bushels and the highest 25,000,000 bushels. The honor of the second closest guess was shared by F. W. Palis of Shreveport, La., and F. C. Smith of Boyden, Ia., who estimated the amount of wheat that would be exported at 6,000,000 bushels. A guess of 5,879,048 bushels was recorded for J. J. Miller of Charm, O., and one of 5,837,401 for W. A. Galbraith of Opelika, Ala. Two guesses of 13,333,333 bushels were received and one guess was made of 11,111,111. The entire number of guesses received was 1,210.

Mr. Lee was born Feb. 10, 1861, in Alexander County, Illinois, on a farm. He left the farm when he became of age, and engaged in railroading for a few years. In the fall of 1888 Mr. Lee was employed by the Jonesboro Elevator Company (Breedlove Smith) of New Orleans, which was operated by the D. R. Francis & Bro. Commission Company of St. Louis, Mo., and has remained with that firm ever since. He is at present employed in the capacity of night man and assistant bookkeeper, besides having other duties, and has always taken a lively interest in the grain trade. He thinks a great deal of his employers and makes their interests his own.

Mr. Lee is a member of the City Council of Jonesboro, a Mason and an Odd Fellow, and a reader of the AMERICAN ELEVATOR AND GRAIN TRADE.

"As to how I happened to make the lucky guess," writes Mr. Lee, "I placed it entirely upon information gleaned from the pages of the AMERICAN ELEVATOR AND GRAIN TRADE. I was always a close reader, and especially so of this excellent paper from the first number I ever saw. I noted from its columns the condition of markets at home and abroad, the movements of grain, the visible supply, the amounts exported in the two months preceding January, 1894, and estimated what I thought would be the probable

demand for wheat from the United States the first month of the year. This, with other information gathered from its columns, I put together, and—well, just guessed. But I will further say, and in all sincerity, that had I not been a close reader of this valuable paper I would have been as liable to have guessed 70,000,000 as the guess I did make."

EARNINGS OF MINNEAPOLIS STORAGE ELEVATORS.

"I notice by your paper that some of our millers complain because there is so much wheat tied up in the elevators here," commented an elevator manager on



EDWARD LEE OF JONESBORO, ILL.

"Change. "Well, they bid up the price of cash wheat last fall, making the elevators pay high figures for what they wanted for winter storage; and as a result, May 1 will come around without our having earned anything like decent carrying charges. But the elevator men will not deliver the wheat on May 1, but will carry it on to July. Wheat, outside of the elevator stocks, is already scarce in the Northwest, and as it promises to be in very much greater demand by summer, we expect to be in a position to exact a good-sized premium on our holdings by the time we are ready to let go of them.

"On several occasions last fall the larger milling firms agreed with the leading elevator companies to co-operate in the matter of regulating the buying of wheat, but some little fellow would go on the market and buy heavily, and this would frighten the millers, and the agreement would be cast to the winds and everybody strike a gait of go-as-you-please. Under such competition, the price was run up much beyond what it legitimately should be, and the difference be-

tween the quotations of cash wheat and the futures was narrowed down so that after the interest and insurance were allowed for, there was not much left to the elevator itself for carrying charges. In view of these facts, we think that the millers hardly have any ground for kicking."

"I guess it is a fact that the elevators will largely carry over the wheat they have in store from May to July," said the head of a leading firm, in talking on the above subject. "I have just arranged to borrow money at 4 per cent. to carry the holdings of our people in this way. At the rate named, the cost for interest and insurance during the two months is about $\frac{1}{2}$ cent. The difference between the price of the May and July options is 1 $\frac{1}{2}$ cents. This leaves $\frac{1}{2}$ cent per month that we will derive for the storage, and at the dullest part of the season. I would be glad to contract to furnish storage on this basis in the best of houses for three years or more at once.

"It seems to me that the time has come, anyway, for a more modern system of storage charges in Minneapolis, as present methods are out of date and applied to early days, when the wheat crop was largely moved before the close of navigation. At present we receive 4 cents per bushel for the six months' winter storage, from November 16 to May 15, this including receiving and discharging, or 1 $\frac{1}{4}$ cents for any fractions of months. Now this period represents the cream of the season, and I am strongly in favor of changing the rules so that the charges will be a certain price per month or fraction thereof. If the houses were to get, say $\frac{1}{4}$ cent for every 10 days, or $\frac{1}{2}$ cent per month, it would be much more equitable and satisfactory all around. Last fall the sentiment seemed to be strongly in favor of a change of this sort, practically all the leading houses assenting to the plan, but when the elevator companies had their meeting to consider the question, one man, who had not been consulted, actively fought the proposition, and, on a vote being taken, the majority was in the negative. I think that the elevator men are now more impressed than ever with the necessity of a change, and when the time comes in the fall, that there will be no trouble about inducing them to act along the line spoken of."—*Northwestern Miller.*

A new move was inaugurated in Washington on Saturday last by S. S. Daish & Son. One hundred tons of No. 1 timothy hay, Ohio, was offered at auction in lots to suit. Radcliffe, Dorr & Co. were the auctioneers and held the sale in front of their place. The hay brought from 77 to 80 cents. This is an entirely new scheme for hay in Washington, and was well received by the purchasers. Messrs. Daish & Son propose to continue selling hay in this way.

THE WEBER GASOLINE ENGINE.

For a score of years there has been a general demand among elevator men and others for a simple engine of some description that would be more economical, safer, cleaner and occupy less floor space than the steam engine with its coal and ash heaps, water service, its long and tedious and very costly waits while raising steam an hour or so before actually needing the power thus generated, and the consequent loss of energy after the engine is stopped, with all the attendant vexations, dangers of fire and explosions; in fact, a motor that could be used anywhere, by any one and for any purpose, and under all circumstances, which would not require attention while in operation, either as regards supplying fuel, or regulating amount of power required and speed.

We present herewith an illustration representing the Weber Gasoline Engine, which was designed to meet just such a want as we have outlined. It is automatic in its workings, and a glance at the cut will show an extremely simple and compact engine built in a plain, serviceable and reliable manner. As in all sizes of the Weber Engine, the cylinder bed and main bearings are of one strong and symmetrical casting, to which the entire valve gear is attached. This assures perfect and lasting alignment. The valve chambers and movable parts are located in a separate casting, which drop into pockets and are attached to the main casting. This feature is especially desirable, as in case of accident, or should they become worn they can be easily replaced, thereby making the engine practically as good as new and making it good for practically an indefinite amount of service. Another new and important feature is that of circulating water entirely around the cylinder, cylinder head and valve chambers, preventing them from becoming overheated and thereby increasing the life of the engine ten fold. The valves in these engines are direct-acting poppet valves, requiring no cleaning or oiling. They lift squarely from their seats and cannot wear out. These engines, when desired for long and continuous runs, are fitted with the wiper device, as shown in the cut, for lubricating the crank bearing. The valve gear and governor is encased in an iron housing, perfectly dust and grit proof and runs constantly in oil, thereby insuring complete lubrication. This feature is very desirable, since a large number of these engines are used for operating flour mills, mining machinery, rock crushers and other places where they cannot be kept clean and where the flying particles of dust and grit would soon cut and wear out this class of machinery, were it not protected.

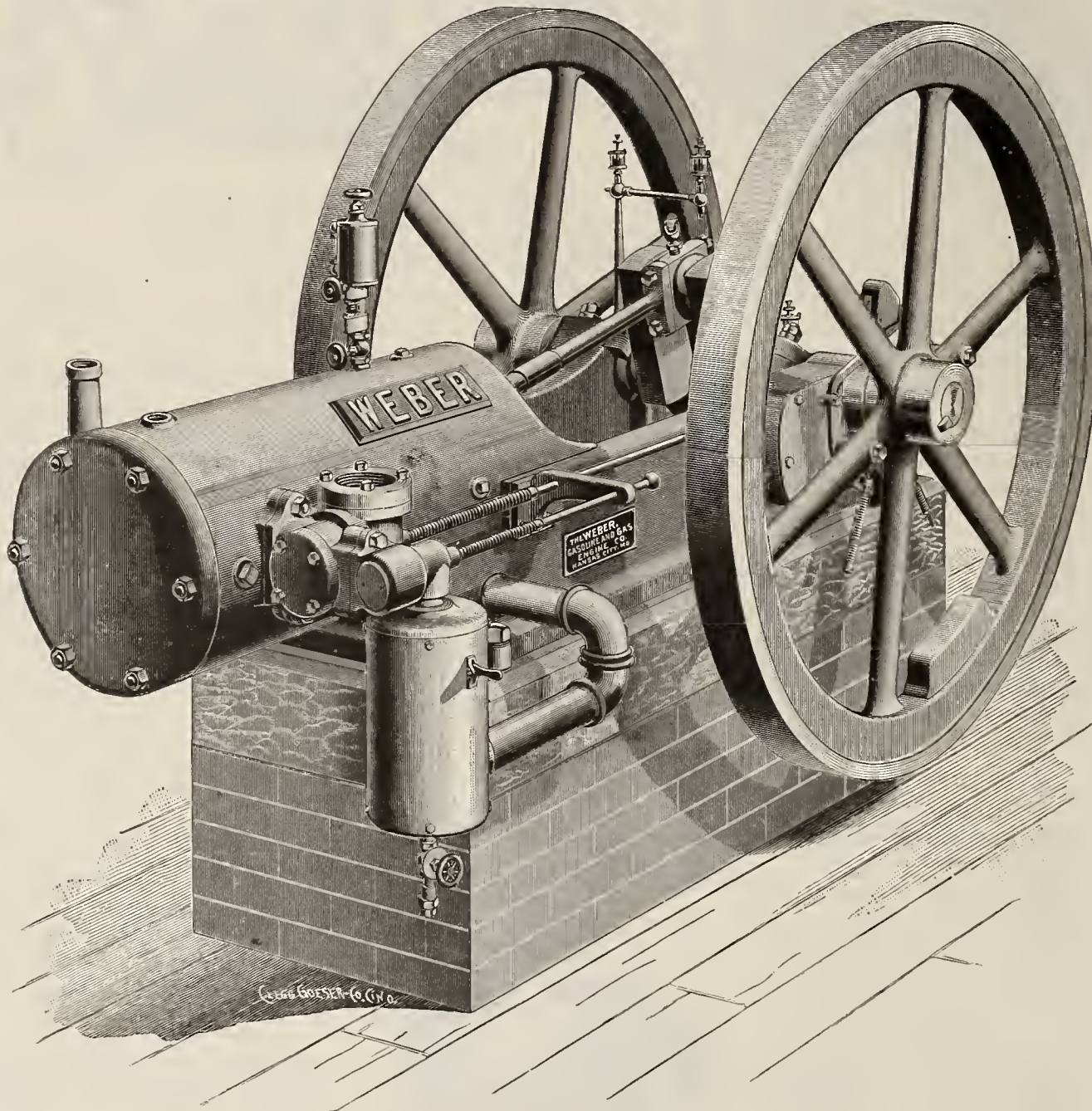
The governor is a very simple and sensitive device, consisting of two weights, as shown in cut, properly tensioned, operating the loose sleeve on the main shaft of the engine, which in turn actuates the opening of the intake valve. The gasoline is used in its fluid state direct from the bottom of the supply tank (which is placed outside of the building). Absolute safety of the Weber is secured by excluding all air from contact with the gasoline until it is admitted to

the engine cylinder in fluid form where it instantly commingles with a large volume of air and is ignited. Safety is also secured by providing against any possible leaks in the pipes between the engine and the tank, and owing to the construction the engine if it should accidentally become stopped and all the valves left open, not a particle of gasoline could escape.

The manufacturers have letters from millers and others who have used their engine, praising its service in the highest terms. It is made by the Weber Gas and Gasoline Engine Co., 405 to 413 Southwest boulevard, Kansas City, Mo.

INSPECTION FEES AT CHICAGO.

At the meeting of the Illinois Railroad and Warehouse Commission February 8, the question of increasing the rate of inspection from 25 to 35 cents, as



THE WEBER GASOLINE ENGINE.

recommended by Chief Inspector Bunker, was discussed, but not decided. In time the increase will doubtless be ordered, but at present there is a sufficient surplus on hand to carry the department without taking such action. There was a deal of good-natured joking among the commissioners about the report that under Mr. Bunker the grain inspection department was running behind and that the surplus fund was being scattered to the winds. "The charges of reckless management and extravagance are not true," said Chairman Cantrell. "The fact that last year's receipts were less than those of 1892 is accounted for by light shipments. There were 20,000,000 bushels of grain in the elevators when Mr. Bunker came into office. It is not his fault that receipts are light. I cannot see how such charges can be made unless they are inspired by politicians."

Mr. Armstrong of Dole & Co. appeared before the board and complained that the inspection of oats shipped by his firm over the Burlington and St. Paul roads was too high and irregular. His complaint was filed.—*Chicago Post*.

Missouri ships a large amount of hay to Florida.

THE CITY OF CHICAGO GRAIN ELEVATORS, LTD.

A few weeks ago the proposed reorganization of the Anglo-American corporation known as the City of Chicago Grain Elevators Limited was made public. Plans for conversion of the bonded indebtedness of the company have been perfected and have been presented in outline to the debenture holders for approval. The new company will be known as the "Chicago Railway Terminal Elevator Company," and the due legal proceedings are being taken here and in England for effecting the change. So far as the bondholders in the present company are concerned there is little change in their security. The present debentures are in denominations of £100 each and bear 6 per cent. interest. The new issue will be of \$2,500,000 6 per cent. gold bonds payable in fifty years, but

redeemable at 10 per cent. premium. The converted issue will be secured by a direct mortgage on the property of the company, while the debentures were secured by a collateral trust of a mortgage. The new issue of bonds will have interest payable in London, New York and Chicago on May 1 and November 1 of each year, the first semi-annual payment of interest to be made next May. The bonds are to be redeemed at 10 per cent. premium or by open market purchase. It is provided that the annual divisible profits remaining after the payment of interest, after the payment of a dividend of 6½ per cent. on the stock, and an accumulation of a reserve fund, shall be divided into three parts, one of which is to be added to the sinking fund for the retirement of the bonds.

The new bonds are to be distributed as follows: Each existing debenture of £100 or \$485 with any accrued interest thereon from Nov. 1, 1893, is to be exchanged for a gold mortgage bond of \$500 in the new issue, carrying interest from the same date. The gold mortgage bonds bearing the equivalent for such of the ex-

isting debentures as have already been purchased by the trustee on sinking fund account will be extinguished on the completion of the conversion scheme or will belong to the new company and be available for subsequent issue on general account.

E. W. Thompson, secretary of the American committee of management, in his circular asking approval of the conversion plan from debenture holders, points out the improvement in direct security on valuable real estate and the benefits which will result from having the management of the company here rather than in London. He says: "Heretofore efforts have been made to secure the listing of the bonds and shares of the company on the London Exchange, but as the company is supposed to be of an industrial character, the Exchange has refused to list these securities because more than half of them are held in the United States. It has been against the policy of the New York Stock Exchange to list securities of foreign corporations."

Tennessee produces annually 80,000,000 bushels of corn, 900,000 bushels of wheat, and 8,000,000 bushels of oats.

ANCIENT AND MODERN GRAIN DRIERS.

Heat has been used to evaporate an excess of moisture and to destroy insects, whether fully developed or in the larva stage. The apparatuses which have been employed to utilize this agent differ in form nor are their results always the same; but seeing that drying by heat (desiccation) has been considered an indispensable process by the competent specialists who in our days have devoted themselves to the storage of grain, it is important to see what are the most convenient and the least costly processes that can be utilized for the thorough drying of grain, says *The Miller of London, Eng.*

It is well known that the ancients used either to dry their wheats in the open air and in the sun, or that these wheats were submitted to the action of a kiln before being committed to the warehouse or the silo. Remains of these ovens have been found in Italy, France and in Spain, and—remarkably enough—it is easy to trace in these relics a strong likeness to the Chinese kilns described in a report made to the French Government in 1788, of which extracts may be read in Bégouillet's great work.

These ancient kilns, as well as the kang of the Chinese, are large chambers with extensive bricked flagstones, and were heated by a stove with several pipes distributed under the flags, while the smoke was carried out by special conduits. (See *Figs. 10 and 11.*)

If we call attention to these ancient and Chinese kilns, it is not that we would recommend anyone to copy them, but to show that at all times and in all countries it has been deemed of the highest importance to dry wheat which it was proposed to store.

In France, Duhamel was the first to call attention (about 1740) to the advantages of drying grain. He first used an oven, but later on a kiln, which was better adapted for its purpose than the kiln that was tried at the same time in Italy.

Duhamel and Tillet pointed out, in 1760, in a memoir to the Academy, how desirable it would be for the practice of drying wheat to be generally adopted. They held that if grain were placed in a kiln at a temperature of 50 to 60 Réaumur (145 to 167 degs. F.) and left there for two spells of twenty-four hours, weevils, grubs, moths and larvae would be destroyed, and they stated that grain submitted to such treatment would not be entirely robbed of its germinative power. Similar experiments were made in 1788 by Parmentier, who also obtained excellent results; but in his opinion, to insure the complete destruction of insects, it was necessary to raise the temperature of the kiln to 90 Réaumur (268 degs. F.), which renders wheat incapable of germination. There can be no doubt that this oven was not inefficacious, but it was not convenient to work, and Duhamel, who had obtained knowledge of the kilns invented by the Italian Intieri, made haste to adopt them with some modifications. This kind of kiln consisted of a chamber almost hermetically sealed; the temperature was raised to a fixed degree; the chamber was fitted inside with shelves, ranged one above the other, each being set at an angle of 45. The wheat was fed in at the two ends, and as soon as it was brought to the requisite degree of dryness the chamber could be easily emptied by opening a trap door in the lower end. (See *Figs. 12 and 13.*)

This arrangement did not appear altogether perfect to Duhamel, who, without modifying the system of heating, which consisted in the use of an ordinary stove, replaced the shelves by vertical conduits, varying in height with their location in the chamber; they consisted of perforated plates of sheet iron, measured a meter in width, and were spaced at about 20 centimeters, so as to pass an air current through the vertical layers of wheat. The ends of all these pipes were fitted into an inclined plane, at the end of which was a slide; by raising this slide the kiln could readily be cleared. (See *Figs. 14 to 16.*)

From the many experiments he carried out, Duhamel came to the conclusion that to thoroughly dry wheat and to keep it from insect attacks, the kiln should be raised to a temperature of 50, 60 or even 80 degrees (145, 168 and 212 degs. F.), and kept at that heat for eight or ten hours and that the wheat should not be withdrawn until 48 hours after being fed in; but it should be noted that by passing a current of

hot air through the kiln, results as good as those of the first method are obtained, and at an economy of time and money.

It is essential to note that the diminution of weight has often varied between a fifteenth and a twelfth, and that of volume between a twelfth and a tenth, according to the greater or less degree of humidity in the wheat subjected to the action of the kiln.

Parmentier criticised the kilns of Duhamel, and falling back on the judicious remarks of Joyeuse,

Fig. 10.

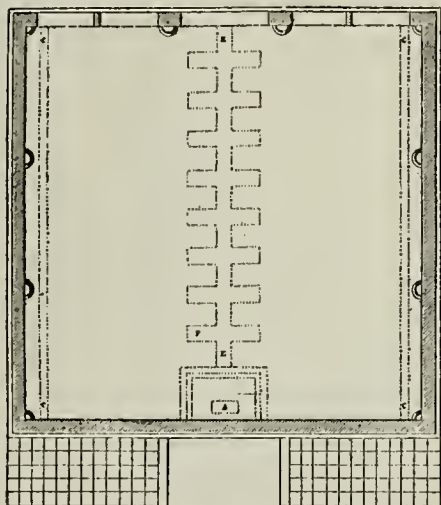
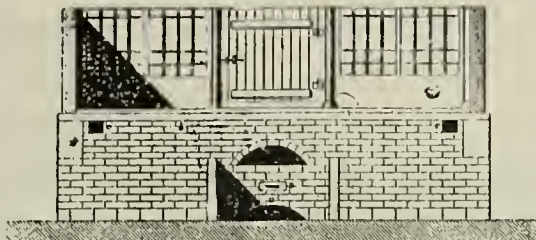


Fig. 11.

ANCIENT AND MODERN GRAIN DRIERS.

who was formerly the chief of the navy victualing yards, on those of Duverney, and of Meslay, he maintained that kiln dried wheats were not placed beyond the reach of insect attacks; that kilns had sometimes the effect of scorching wheat; and lastly, that wheat which has been dried will quickly reabsorb the moisture from which it has been freed, if it be exposed to the air. But he admits that in wet years or when wheat has been attacked by insects, the action of fire will alone

Fig. 12.

Fig. 15.

Fig. 14.

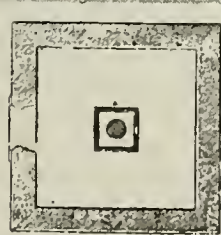
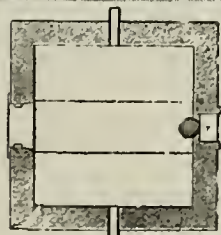
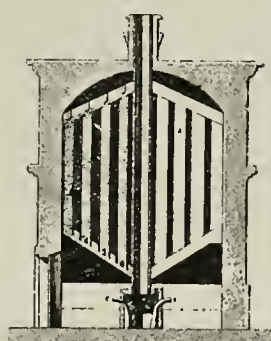
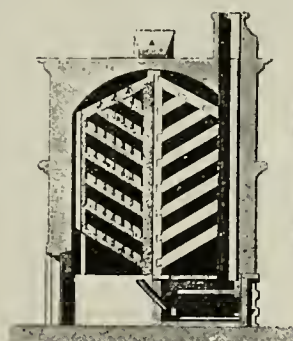


Fig. 13.

Fig. 16.

ANCIENT AND MODERN GRAIN DRIERS.

avail to stop the evil; and he expressed a wish that lords of manors should fit up some kind of drying place above the common ovens, until such time as, following the lead of the Chinese, we should set up public kilns. Parmentier was therefore far from disputing the utility of kilns; but he preferred ovens, and in his deliberate opinion the best results were to be attributed to desiccation by free air.

Duhamel's kiln was never very generally used, and to dry grain a sort of kiln, known as the brewers' malt-kiln, is commonly employed. I have seen this very simple apparatus in Holland, in England and in Ireland; it consists of a large stove, heated by coke; generally speaking, two meters above the furnace is a flat surface made of plates of sheet-iron or of slate. These plates are pierced with holes, through which a current of hot air freely passes and is carried to the

upper part of the roof, which is of masonry and terminates in the shape of a pyramid.

The double malt-kiln, which I had an opportunity of examining at Mr. Alexander's at Millford, near Carlou, consisted of two furnaces and two chambers, each of six square meters; it is capable of drying 250 metric quintals (the metric quintal is 220.46 lbs.) of grain in 24 hours, and its cost per day is as follows: Consumption of coke, 251 kilos, which at 30 francs the 1,015 hectoliters, cost 12 fr. 52 c.; daily pay of four laborers, who each receive, at 1 fr. 87 c., 7 fr. 48 c.; in all 20 fr.

It follows that fuel costing about 5 fr. per metric quintal, and laborers being paid about 1 fr. 87 c. a day, the cost of drying a metric quintal of wheat is 8 centimes, whereas with our system the cost would be but 6 centimes. It should also be observed that with this method of drying it is necessary to stir the wheat at frequent intervals, in order to prevent its being scorched by reason of too long resting on the floor, which is heated to a high degree; now, as the carelessness of an operative may cause the wheat to be scorched, it does not seem to us that this apparatus should be used except with such modifications as not only to keep the grain continually moving independently of manual labor, but also to discharge it without the intervention of the operative.

When a factory is furnished with a steam engine, there is an economy in heating the kiln by hot air through pipes traversing the boiler furnaces, and aspirating through open holes underneath the flooring of the kiln. Some of these malt-kilns are furnished with ventilators, so as to quicken the evaporation.

Cadet of Vaux would have grain torrefied the same as coffee, but such a process has not been put into practice, because it would have this drawback, that we should run the risk of scorching some proportion of the grain, and that would tend to unfavorably affect the whiteness of the flour.

Terrasse of Billons invented an apparatus consisting of a triple wooden screw, which was disposed round a spindle and revolved in a fixed cylinder, through the interior of which a current of very hot air was kept continually passing; as the wheat passed through this cylinder, it became thoroughly dry. This system was deemed workable, but the production of the current of hot air was found to be troublesome and costly, and to that cause we are to attribute its failure.

In 1821 Jones of London invented a vertical kiln, in which the wheat was allowed to fall by its weight, by means of which passage it was possible to completely free it of excessive moisture. This kiln consisted of two concentric cylinders of different diameters, which were made of pierced sheet iron, and were terminated at both the upper and lower ends by sections of cones. Inside the inclosed cylinder was placed a hot air stove for heating the apparatus. The wheat fell through the upper end, traversing the space between the parallel surfaces, and came out dry at the lower end.

M. Wattebled, a French mechanical engineer, under the name of *trogotone*, introduced to manufacturers an apparatus closely resembling that of Jones, but which is, however, differentiated from it in several points. The chief modifications consist in replacing the perforated sheet iron by metallic cloth, which hastens evaporation; in the interposition between the cylinders of blades, by means of which the grain is compelled to describe a certain course before being discharged; in the fitting of sheet iron shutters around the outer cylinders so as to keep in the heat; and lastly, in the use of a more powerful heater than belongs to the English machine. The Admiralty is in possession of this apparatus, which may be used with advantage when the wheat to be dried is small in volume, but only on condition that the wheat shall not be excessively humid; for the apparatus being small in its dimensions, very damp grain would cake in the blades and stick to the metallic cloth, and as the temperature can never be exactly regulated, it would be liable to leave the machine partially scorched.

A few years ago trial was made in France of a drier which has the advantages and drawbacks of the machines that have just been described; still it does not lack simplicity. It consists of a long, worm-like tube, similar to the serpentine worms of distillers, which, starting from the ceiling of the warehouse, is brought up to a stove laid on the floor. This tube is inclosed

in another of the same shape, which is made of pierced sheet iron, and which has a diameter larger by six centimeters than its fellow. The wheat is fed in at the upper end of the enveloping tube, and, traversing all the windings, is discharged dry on the floor, without calling for any hand labor.

M. Robin of Chateauroux has invented a kiln of which the interior is shaped very much like the troctone; it consists of three concentric cylinders. The inside of the interior cylinder and the space between the second and third cylinders receive steam issuing

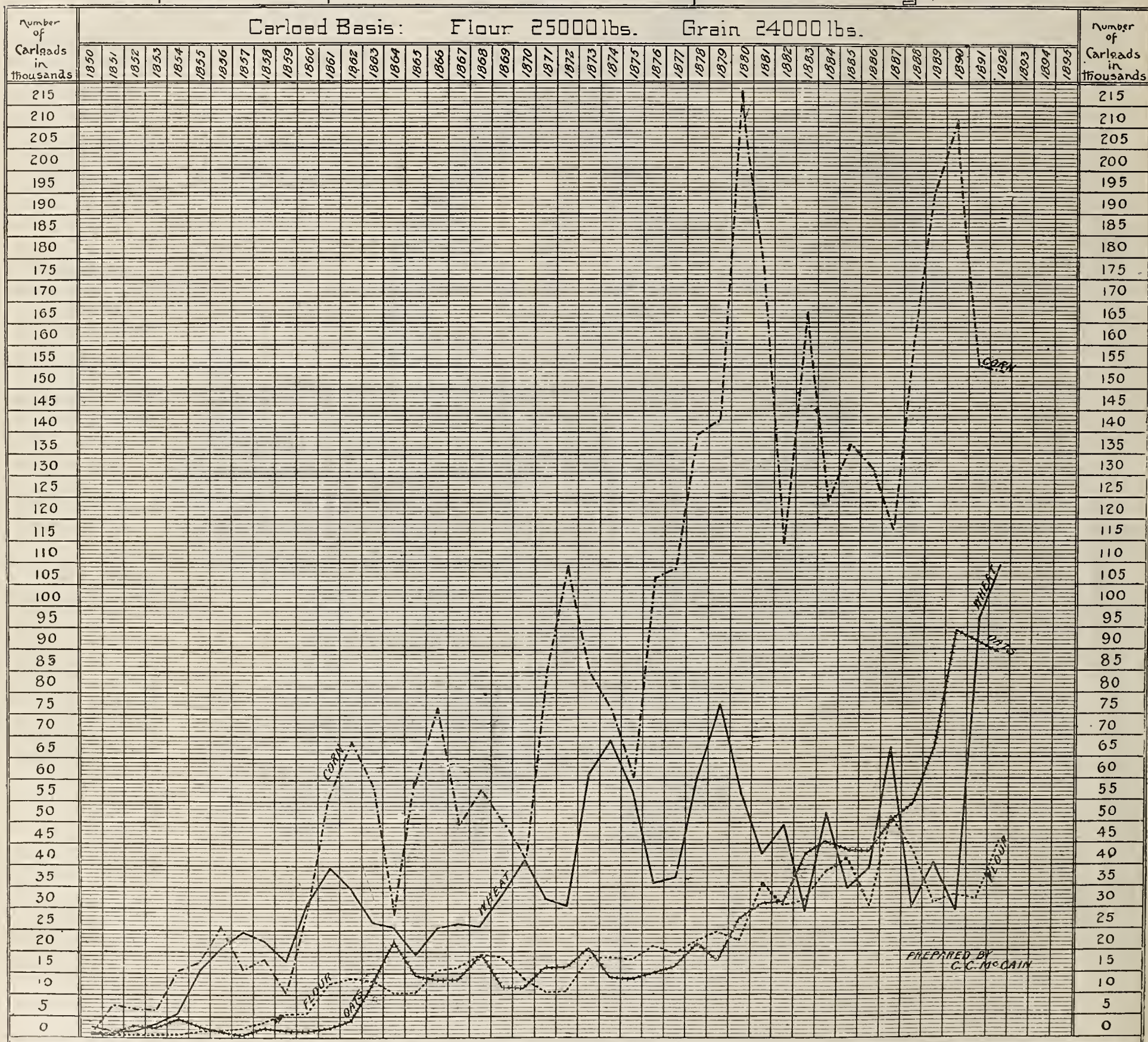
Mr. Else. It consists of a cylinder in compartments so arranged as to favor evaporation, while the apparatus, which is made to revolve, is heated by a hot air stove. The grain is kept in continual motion, and it always offers a large surface to the hot air.

MM. Call, Jr., and David have invented a grain drier. The principle on which this system is based consists of passing washed or damp grain over a series of sieves following one another, in the midst of a column of hot air. The sieves may be subjected to an alternating vertical motion, either at their lower end,

SHIPMENTS BY RAIL FROM CHICAGO.

The accompanying diagram, which was kindly loaned to us by the *Railway Review* of this city, affords an excellent illustration both of the comparative quantities and fluctuations in amount of the shipments of food products from Chicago, during the years from 1850 to 1892 inclusive. In this record, both as to quantity and variation, corn takes a commanding lead. The movement of flour and oats from 1850

Transportation Graphics—Flour and Grain Shipments from Chicago, Ill. 1850 to 1892.



from a tubular retort heated by a stove; the grain is fed into the space which separates the first from the second cylinder at the upper end, and is discharged by the orifices of the cone that terminates the lower end of the cylinders. It is said that if the temperature of the apparatus be raised to 60 degs. R., and the wheat be left in for 40 minutes, this process will destroy larvae and weevils; that has been attested by a committee. I will observe that insects can be destroyed by other kilns, and even by the oven, provided only the wheat be exposed to a temperature of 60 to 80 degs. R. (167 to 212 degs. F.); I will add that, in my opinion, to effect this result, water reduced to a state of steam does not appear to be a suitable medium.

In London I inspected an apparatus invented by

or at their upper end, or at both ends at a time. The sieves may have an alternating longitudinal motion, and are set at such an angle as to assist the fall of the grain by its own gravity alone. The angle of the sieves will, however, in all cases, vary according to their position in the series; thus, the first sieve at the head of the apparatus, which receives the grain washed or very humid, will be set at a much steeper angle than the last sieve, which the grain will reach when it is almost entirely dry. The circulation of hot air may be effected either by the draught resulting from the difference in the specific gravity of the hot air and the cold air, or by the action of any blowing apparatus, or by a fan moved by centrifugal force, or by any other mechanical means.

to 1887 was comparatively regular, showing a steady increase, but with corn and wheat, and especially the former, the fluctuations not only cover a wide range but are apparently unaccountable. There would appear to be nothing in market conditions on the one hand, or amount of crop on the other, that starting with 41,000 carloads in 1870 would in 1873 increase the shipment to 110,000 carloads, to fall in 1875 to 60,000 carloads, to again increase in 1880 to 218,000 carloads, decline in 1882 to 115,000 carloads, again increasing in 1883 to 168,000 carloads, falling in 1887 to 118,000 carloads, reaching in 1890 212,000 carloads, and ending the record in 1892 at 154,000 carloads. It is also noticeable that while the fluctuations of wheat followed to a greater or less extent those of corn (the ratio of

differences being, however, much less) which in 1890 when the shipments of corn reached the next to the highest point, viz., 212,000 carloads, the shipments of wheat reached their lowest point since 1868, to wit: 29,000 carloads; and although the shipment of corn declined in the next two succeeding years 58,000 carloads, the wheat movement in the same two years increased 80,000 carloads. The diagram affords many other interesting point of comparison and will, no doubt, be studied with attention by those interested in the movement of these commodities.

WANT WHEAT ADMITTED FREE OF DUTY.

"It is suggested that the millers and grain men of this city ask for the removal of the duty on wheat, that the Manitoba product may be put upon our market and dealt in the same as the Minnesota and

THE BULLS AND BEARS.

In the world of grain speculation which centers about the grain exchanges of this country and Europe there is a continuous contest for supremacy. For a long time the Bears have held the upper hand and the Bulls, with the exception of a spurt now and then, have skulked about with heads bowed low in dejection.

A card bearing the picture of an entirely different situation has recently been sent out by the Abner L. Backus & Sons Company, grain and seed merchants of Toledo, through whose courtesy we are enabled to present same herewith. Many of our readers have wildly wished for and expected the situation depicted for many weeks past, but all in vain.

The illustration given herewith represents a herd of Bulls, with flashing eyes, heads and tails erect, charging upon a whole troop of Bears, formerly the masters of the plain. The frightened, howling,

statistics are all completed and the whole country has banked upon them, along come Mr. Pardridge and his class and quietly upset all of our carefully compiled statistics by unloading upon the country three or four times its statistical grain, and other plungers emboldened by such success soon give the finishing touches to the business by unloading an equal amount from the same legalized wind machine, and the result is what you see now. While this wind selling was once confined to the professional speculative element in large cities, and the purchasing element was in the country, the statistical situation, combined with this country element, many times got the better of the wind machine, but now the poor countryman, forced by repeated losses, has learned the secret of the wind machine's power, and now about nineteen out of every twenty of them are short sellers, and is it any wonder statistics are of little value?

"The grain exchanges, by the legalizing of the art of



THE RAID OF THE BULLS UPON THE BEARS.

Dakota article, and that our millers may make use of the famous hard wheat that grows west of Winnipeg, says the *Tribune* of Duluth. Why not?

"If iron and coal and lumber and other articles are to be made duty free for the benefit of the farmer, why not take the duty off wheat for the benefit of the consumers of flour?"

"There is no question that the removal of the duty would stimulate the wheat trade of Duluth, and it would at times give our millers the benefit of a quality of wheat that they do not always conveniently get on this side of the border. Two railroads run from Duluth to Winnipeg now, and the Canadian Pacific will soon have a line to the head of the lakes. When this line is completed there would be a good deal more Manitoba wheat come to Duluth if it could be sold upon our board, instead of being shipped in bond. To the extent that the shipments are made this way our commerce and grain trade would be benefited by taking the tariff off of wheat."

The Millers' & Feed Dealers' Protective Association of Toledo, Ohio, held a meeting recently.

panic-stricken Bears are hunting their holes in every direction before the victorious strong-necked champions of high prices.

The Backus Company write us as follows: "We are uncompromisingly in favor of the governmental regulation of the option trade, and we believe now is the time for every well wisher of our great grain growing, grain handling, milling and kindred interests to do all they can to preserve our now imperiled trade.

"Denison B. Smith, secretary of the Produce Exchange, says there is no change for the better in conditions. In fact, if Liverpool is our basis, the change is bearish. We don't know enough to know whether Liverpool is the basis or not. Sometimes the conviction comes to us that we are selling too much wheat, and that the pace is too sharp in that line, and may be overdone. If we can export two or two and one-half millions in wheat and flour per week until July 1, and have enough left to eat ourselves, we will never dare to look at a table of statistics again. We begin to think they are the heritage of fools anyway.

"If it were not for one thing our statistics would be all right and the people believe in them, but after

selling, have been nursing a viper in their bosom that has now assumed such proportions that unless governmental restrictions, such as are contemplated in the Hatch bill or some such reform as some of our gentlemen in Chicago are now so hopelessly trying to inaugurate, the ruin of the grain growing trade in our land and in legitimate grain handling in our cities is very near.

"A year ago it was considered rank heresy to advocate such views as above by a grain man, and we ourselves were cited before our directory and tried for promulgating them. A few of the farthest sighted men in the country could see beyond the immediate present, and we are pleased to see the number is enlarging, and if an organization could be made of a few prominent grain houses who could agree upon some concerted action, in the present situation, they could practically dictate the new order of things that is absolutely sure to come."

Pop corn has been received by Chicago grain dealers lately who report that it had been badly damaged by mice.

THE HICKS COMPOUND GAS ENGINE.

The gas engine has been found to fill the requirements of a compact and economical motor or power producer free from danger of fire or explosion, simple and of small cost in operation. Mr. John B. Hicks, the well-known inventor and manufacturer of steam engines, having given this subject considerable study, has placed on the market what he claims to be a perfected gas and gasoline engine.

In a gas engine the combustion of fuel takes place directly in the cylinder behind the piston, and its full effective heat energy is utilized in the expansion of the air with which it is mixed. In the Hicks Gas Engine two cylinders set in line are employed to work alternately, their pistons being on one piston rod, to which an effective impulse is imparted for every revolution of the crank, doubling the power of the engine while adding only the weight of one cylinder and piston (a very small percentage of the whole weight of the engine). By thus doubling the number of the effective strokes of the piston a very light balance wheel may be used with good results.

The operation is as follows: The gas throttle valve being opened the fly-wheel is turned by hand once or twice and the engine will start into full operation. At the first movement of the piston the explosive compound will be drawn into one of the cylinders through the valves, which then close and prevent its flowing back into the pipe as the pistons make their stroke. While the compound in the first cylinder is being compressed the crank shaft passes its center, the charge in the other cylinder is exploded, and the expanding air and gases

drive the piston rapidly and start the engine. When the piston has completed its movement and starts back the upper escape valve is opened and the burnt gases in the cylinder are allowed to escape. On its next movement the piston again draws in a fresh charge of the compound, which is compressed and exploded as before. When the pistons are moving under the impulse of the explosion in the first cylinder the other cylinder is drawing in its charge of the compound to be compressed and exploded, while the first cylinder is being cleared of the burnt gases and recharged. The two cylinders thus work alternately. Above 25-horse power the engines are self-starting.

The Hicks Compound Gas and Gasoline Engines are constructed with from 2 to 100-horse power, both vertical and horizontal. In this engine there is no cleaning of valves, as they are all of the direct acting vertical Poppet style. It requires small floor space, and change of temperature has no effect on the operation of the engine. There can be no improper mixture of gas and air, and the governor admits only as much of the explosive compound to cylinders as is required to carry the load on the engine. If the load on the engine requires it there may be one explosion to each revolution. It is self-adjusting in every way, has regularity of speed, can use either gas or gasoline, and can be used in any place where power is wanted.

Every engine is tested before leaving the factory, and is guaranteed to be of first-class workmanship and material. For any further information address the Hicks Gas Engine Company, Cleveland, Ohio.

WHY WHEAT IS CHEAP.

The future of the wheat market and the future of the American wheat grower are so uncertain that especial interest attaches to an official report on the cause and remedies of agricultural depression about to be presented to the Senate. This document will be submitted by Senator Pepper, who for more than a year has been at the head of a subcommittee having the work in charge. Advance sheets of this report are at hand, and among other things include the following on the wheat situation:

The farming area has been greatly enlarged since the war. The wheat acreage increased during the twenty-two years following 1870 from 18,992,000 acres to 38,554,000 acres, corn from 38,646,000 to 70,626,000 acres, and oats from 8,792,000 to 27,000,000 acres. With the stimulus to grain growing came correspond-

were used to convey information concerning crops, before the Suez Canal was open for traffic, and before steamships were built that can carry 100,000 bushels of grain from New York to Liverpool in ten days, a very heavy crop or a very light crop of any particular kind of grain in the United States materially affected market prices here for the surplus. Now, however, with present conveniences for handling, storing and shipping grain, with low rates of transportation over long distances, it is the world's production and not that of any one country that affects market values of grains which go into the channels of commerce.

Competition among farmers affects prices just as competition in other departments of industry affects values in those departments. There is a kind of competition among grain farmers that does not affect prices locally or generally—what has been known as "bonanza" farming, as it is carried on by men who operate on large tracts of land acquired when land values were low. This method of farming has brought the cost of producing wheat down to about 35 cents a bushel on an average in North and South Dakota. When it is considered that the market price of our

surplus wheat is fixed in Liverpool, and the export price to a large extent controls the price for which it is sold in the home markets, it is readily seen that large quantities of 35-cent wheat thrown on the market must have a depressing effect on the general average of profits in wheat farming. In California, under the improved methods of plowing, seeding and harvesting, the cost of producing a bushel of wheat has been reduced to about 22 cents on an average crop.

Our strongest rival is India, whose farmers during the seven years, 1886-92, furnished nearly one-half as much

as we did of the wheat requirements of our best customer. It is interesting to note that India's exports of wheat in considerable quantities began only about twenty years ago. Of the world's requirements in 1868 that country furnished only 559,000 bushels. In 1887 her wheat exports amounted to 41,558,000 bushels. It has fallen off some since; the annual average from 1888 to 1891 was about 28,000,000 bushels. Our annual average exports of wheat, exclusive of flour, have been about 80,000,000 bushels during the last seven years.

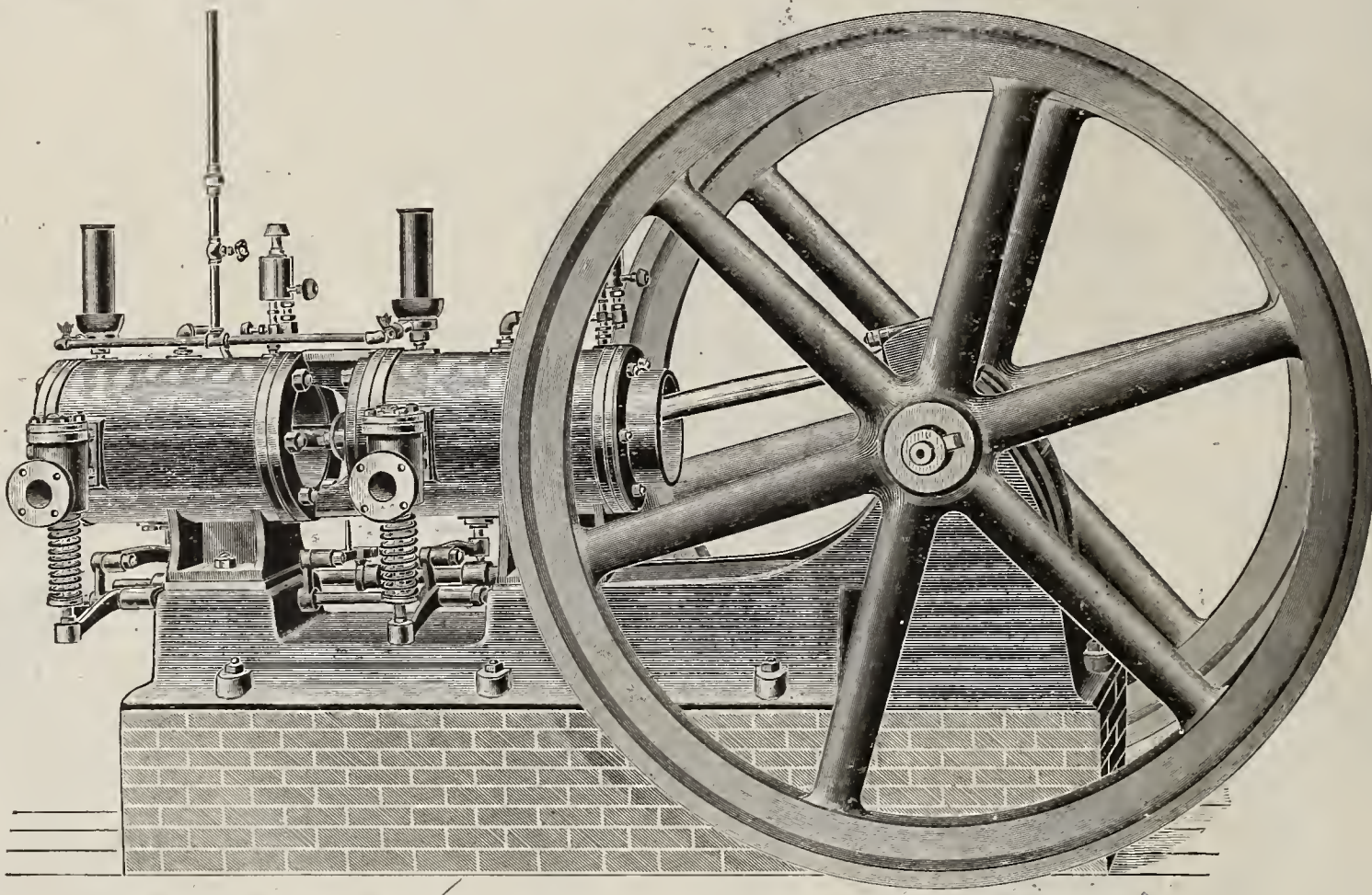
If the Liverpool price governs prices at other places it is easy to see that India wheat competition in that market, to the extent shown in the foregoing figures, does injuriously affect the price of American wheat. The opening of the Suez Canal has cheapened transportation from Bombay and Calcutta to Liverpool 50 per cent. Wages of India farm hands are from 6 to 10 cents of our money per day. Wheat costs only about 13 cents a bushel on the farm. Twelve cents more puts it aboard ship, and 25 cents additional places it on the wharves at Liverpool and London. Thus 50-cent wheat from India competes with wheat grown on American farms at an average cost of 60 cents a bushel.

Regarding a general cause of depression, the cereals being annual productions, their market values are affected more or less by large or small yields from year to year. This is true not only as to local prices, but to market values of the surplus generally. Effects produced from this cause are much less now than in years before the facilities for distribution had reached their present state of development. When thirty to forty days were required for the passage of a ship bearing a cargo of 10,000 bushels of wheat across the Atlantic Ocean, before telegraph wires and cables

ing development of the milling industry. Merchant milling has become so common that farmers now quite generally sell their wheat and buy their flour as they need it. The market for wheat in the United States is fixed by dealers on the Chicago Board of Trade, and for all the surplus wheat and corn exported the price is fixed in Liverpool.

The extension of the agricultural area took place chiefly in the new states of the West; it produced a marked effect on farming operations in all parts of the country, and it had corresponding influence on the general conditions of agriculture. It may be said, as to much of the grain-growing land of the country, that it has improved in recent years. This is true particularly in New England and the old Middle States. Well-managed farms there now yield more wheat by the acre than they did fifty years ago.

Kansas raised 762,000 bushels of flaxseed and 249,094 tons of broom corn during the year 1893.



THE HICKS COMPOUND GAS ENGINE.

PROFITS OF BUFFALO ELEVATORS.

The New York *Times* took occasion to review the old complaints against the Buffalo elevators this week, in connection with some remarks on the cut in freight rates by the Chesapeake & Ohio route to Newport News. It was a queer notion, writes the Buffalo correspondent of the *Northwestern Miller*, for, whatever the Buffalo transfer system may be accountable for, it certainly has nothing to do with winter grain business. Without going very deep into the question, it is but fair to give notice that the old charges against the Buffalo elevators have not applied for some time. The idle capacity is now reduced to a small percentage, and is confined to elevators too old or too small to be worth running. As to overcharges, the large, new Kellogg elevator has, for some time, been offered for sale, as the profits are not satisfactory.

The state elevator for this harbor, which the *Times* advocates, is plainly seen to be no remedy for what is confessed to be a heavy charge on the traffic. Independent elevators were unable to do any material amount of business last season, and one that was begun was never finished. The canal men were offered a good storage house at reasonable rates last winter, but declined to take it. Admitting that charges are high, the real difficulty lies in the fact that, as elevators are still built and as the work is done, there has not been the cheapening of rates that has taken place in all other branches of commerce.

Let cavilers set about and suggest some new system by which handling can be actually cheapened, and something will be gained, but otherwise we must rest on this retort—that there is nothing to prevent outsiders from coming in and building elevators. They will then find out what the profits are. So far, all the charges of extravagant profits by the Buffalo elevators have not attracted a cent of outside capital.

MIXING HAY IN CARS.

Much trouble has arisen between the buyer and seller of hay, from the mixture of grades in the same car, and unless hay is loaded from a storehouse, where there is plenty of room for sorting it, it is almost impossible to avoid this trouble, says the *Hay Trade Journal*. When unloading directly from trucks into cars, it very often occurs that cars are scarce, and to protect the hay from the storm the shipper may be compelled to load it as it comes. This, a shipper suggests, could be avoided in a great measure if the parties pressing the hay would keep each kind by itself as it comes from the machine, so that in delivery at the station each grade could be drawn separately. It is evident that to avoid this trouble and make a success of the hay business, the shipper must devise some plan to start the goods properly. The plan mentioned might not work perfectly at its beginning, but after it is put in force it will no doubt improve as the parties become more familiar with the grades.

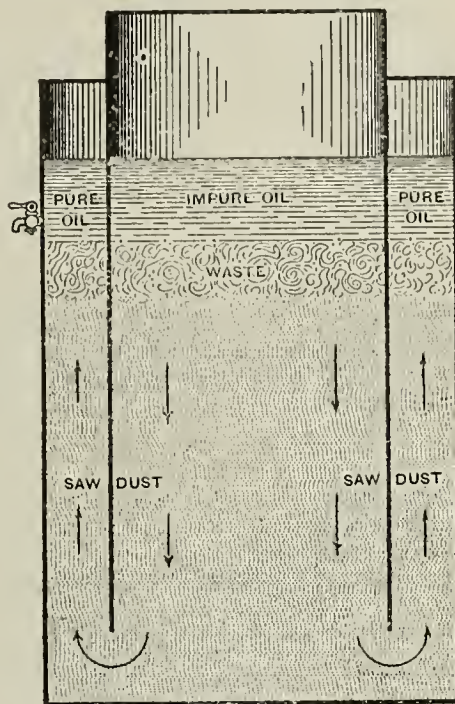
There would be another important feature in this, as each grade then could be kept by itself, not only as it is stored, but a record kept showing the number of bales and the weight of each kind, which would show the buyer and seller exactly how many tons there would be in each, which would allow the purchase and sale to be made intelligently, which would protect them both. Unless the farmer has this record he is unable to tell the purchaser what he has got to offer. The purchaser, in turn, is in doubt about what he can pay for the lot, and as a rule, has to take the chances. In many cases, when buying large lots that may appear to be No. 1, he finds that 60 per cent. or more of it is below that grade.

When butter, cheese, hops or grain are bought, they are paid for according to quality. The principal trouble with the hay trade is that it has been bought and paid for as you see it, which is usually at its best, when in reality only a small portion was worth the price paid, and the balance from \$1 to \$5 per ton less. In other words, much of the trouble and many of the losses are made before the hay leaves the farm. This

plan of grading, if pursued, would obviate it to a very great extent, and would be well worth the trying.

A CHEAP OIL FILTER.

The accompanying illustration shows an oil filter which has been found by trial to give satisfaction. This filter, which is easily made, is constructed as follows: Take an old oil can that will hold about forty gallons, and inside this place a galvanized iron or tin tube raised from the bottom by a couple of sticks and projecting about six inches above the top

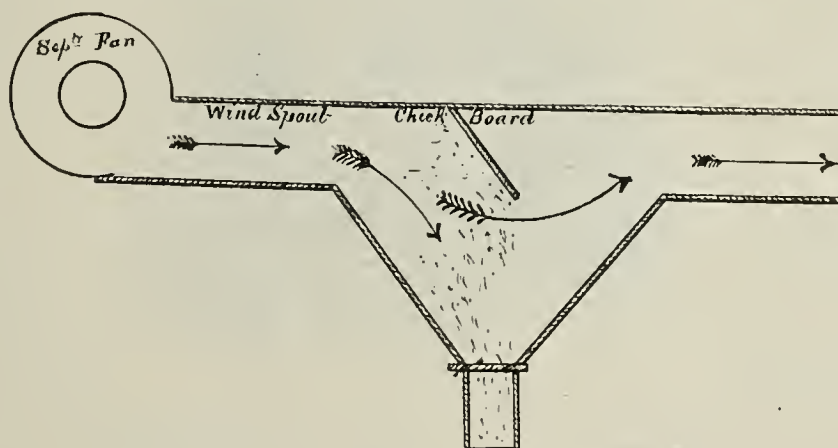


A CHEAP OIL FILTER.

of the can. The can and tube are then partly filled with clean sawdust with a layer of waste or cloth on top, as seen in the sketch. The impure oil is poured into the tube, filters down through the waste and sawdust and then up again into the can. It can then be drawn off when needed. If a water filter for the oil is desired, a few buckets of hot water should be poured in first. The oil will pass through the filtering material in the same way as without the water.

A SCREENINGS CATCHER.

The accompanying cut illustrates a screenings catcher, which will be found very useful in elevators.



Screening Catcher

Screenings will get into the grain, no matter how careful one might be, and a screenings catcher of this design has been found to answer all ordinary requirements. This device is constructed as follows: First, cut about 3 to 4 feet of board from the bottom of your wind spout and fit in a check board at an angle of 45 degrees. Then, at about the same angle, make the catcher similar to the one shown in the illustration. It will be observed that the opening at each side of the check board is slightly larger than the area of the wind spout. This is done in order that the draught may not be impeded too much. The process is so simple that it needs no explanation. The screenings, in coming from the fan, strike the check board and fall into the dead chamber below, while the air passes on out through the trunk.

CHEAP TRANSPORTATION FOR EXPORT GRAIN.

The Montreal *Press* is urging that tolls on Canadian canals be abolished or at least be remitted on grain East bound, claiming that on grain for European shipment a permanent advantage will be given over the Erie Canal.

The Montreal *Gazette*, discussing this, asserts that the people of Canada are in full sympathy with the policy of canal improvement which the dominion government is pursuing—a policy which contemplates the deepening of the waterways until vessels of fourteen feet draught can pass from Lake Erie to the head of ocean navigation. But they do not feel at all confident that the improvements in progress will divert the grain business largely from the Erie Canal route unless tolls are abolished on the Canadian canals. The *Gazette* gives figures showing a large increase in grain shipments by the Canadian routes, but it shows that while there is an important absolute gain there is in reality no gain in comparison with the Erie route, for the increase in traffic by that route is fully as great as by the Canadian routes. Hence the conclusion that tolls must be removed from competitive traffic if this traffic is to be largely diverted to Montreal.

The people of the West who have grain to ship can view with complaisance this commercial rivalry between Montreal and New York. The livelier the competition for the carrying trade the lower will be the rates exacted, and the cheaper that grain can be delivered to the seaboard the larger will be the profits in the Liverpool market.

A RICE ELEVATOR.

What the New Orleans papers call "the first rice elevator in the world" has just been erected in that city. "The plant consists of an elevator tower, into which the grain is directed through a movable chute from the loaded railroad cars and from which it is transferred by machinery to the bins and barrels of the warehouse, the latter being connected with the elevator tower by a covered bridge. The rice, on reaching the summit of the tower, is spilled out on a rubber belt some sixty feet in length, running at a high rate of speed between rollers inclined at an angle of 60 degrees. These rollers are located at intervals of eight feet and serve to keep the rubber belt curved in such a manner that the rice is not spilled while in transit. This belt terminates just within the wall of the warehouse, where the grain is received in a hopper. At the bottom of this hopper is an aperture opened by a trap door, through which the rice is spilled onto a screw conveyor traversing the length of the second story of the warehouse and passing over a series of bins designed to receive the grain. By a delicate arrangement of scales and weights the rice is weighed while in the hopper.

"At regular intervals rubber belts, similar to the one running from the elevator tower, receive the rice from the screw and carry it across to the bins. An ingenious contrivance causes it to be dropped into the receptacle when that receptacle is reached. A single man can operate this apparatus and thus control the movement of each class of rice, till it is finally deposited in its appropriate bin. Its travels are by no means terminated at this point. Six screw conveyors traverse the ceiling of a lower story. Opening the trap doors in the bottom of the bins on the story above, the rice enters the spirals of these machines and is borne across the building and received upon another rubber belt. This leads directly to the milling department, where the husks are stripped off and the grain prepared for the market. The capacity of the elevator is estimated at about 800 barrels per hour, which is equivalent to 2,400 bushels or four loaded cars. The warehouse can accommodate 90,000 bushels of grain."

In February last 656,638 bushels of wheat, valued at \$330,000, was exported from Tacoma, Wash.

STATE REGULATION OF ELEVATORS WANTED.

At the time the constitution was adopted special efforts were made to have the farmers protected against the extortion of men who controlled grain elevators. The farmers of this state now find that the same condition of affairs exists which existed in Illinois before the state passed laws to regulate the inspection of grain and authorized the appointment of state inspectors. Under the old system No. 1 wheat was graded as No. 2 or as rejected. The owners of elevators claimed the right to manage their business as they pleased. The railroads claimed the right to deliver all grain shipped on their line of road at such elevators as they chose to deliver it.

Suit was brought in the state courts to determine these questions. The state courts sustained the right of the state to regulate grain elevators and to fix the rates to be charged for inspection. The cases were taken to the Supreme Court of the United States and the decision of the state courts affirmed. Legislation must be had in this state to protect the farmers and shippers of grain. Already the farmers are at the mercy of the elevator men. Relief cannot come too soon.—*People's Call, Seattle, Wash.*

GERMANS WILL NOT EAT CORN.

According to a statement in the forthcoming report of the statistician of the Department of Agriculture, Col. Cornmeal Murphy's philanthropic efforts to teach the German people to eat the products of maize have proven futile. The land of sauer kraut and beer will remain true to rye bread and "pumbernickel." The authority for this statement is John Mattes, Jr., special agent of the Department of Agriculture, who was sent abroad to verify the glowing accounts of the enthusiastic apostle of cornmeal as well as to aid him in his efforts. This is what Mr. Mattes says:

"There have been efforts made in the past by the agricultural department to teach the Germans how to bake and eat corn bread. The attempt to increase the consumption of maize by this method has been a failure and never will be a success. In spite of encouraging reports sent to the department the facts remain that, although a natural shortage of other breadstuffs, famine, or war may increase the consumption of maize for bread, in all cases it will be only temporarily. The Germans do not eat hot bread, and the other ingredients necessary to make corn bread palatable are too expensive and not within the reach of the poorer classes, for whom the bread is mainly intended. Maize bread does not harmonize with the rest of the diet generally preferred by the Germans and to which they are accustomed. Rye bread will always be the bread for the majority of Germans, and bread made from the very choicest of wheat flour is demanded by the wealthy classes."

But while this discouraging statement is made about cornmeal bread in its various forms, Mr. Mattes gives some encouragement to the growers of corn in showing how its use has been increased in distilleries and in vinegar factories. So, if the Germans refuse to eat it in the shape of good wholesome corn dodgers and hoe cake they do not decline to drink it in the form of Bourbon whisky. On this point Mr. Mattes says:

"Manufacturers of these articles learn to know, day by day, more of the value of maize, and find that it will give a larger yield of alcohol than any other material they can use. Whenever manufacturers find it to their advantage to use a certain article we may assume with certainty that they will continue to utilize it, and consequently in this direction a continuous consumption of maize may be looked for."

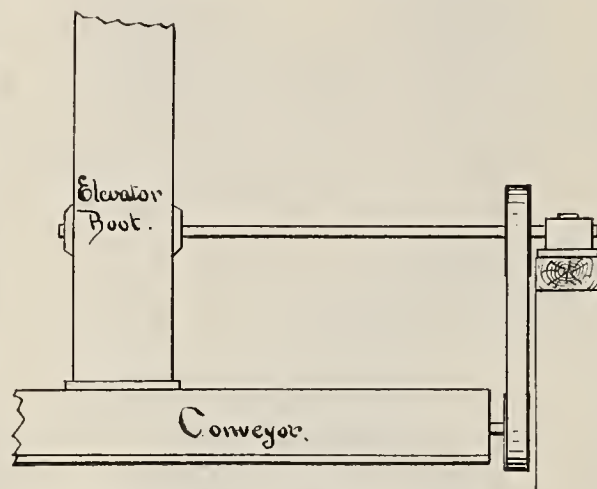
"The distribution of pamphlets relative to the using of maize for brewing purposes has been the cause of many inquiries, and many brewers have made practical experiments with satisfactory results. The German method of brewing is different from the American, especially so in the process of mashing; consequently it has been found advisable to induce the director of the brewers' school at Worms to make practical experiments with maize grits according to the German method of brewing. German brewers seem to have great confidence in the work of this

school, the method of brewing taught being that used by most brewers. This season barley and rice are cheap, almost cheaper than a good quality of maize grits, which explains in part why brewers will not make extensive experiments at this time."

Perhaps the most curious fact developed in Mr. Mattes' investigation is the opposition to American corn as feed for cattle. All sorts of ridiculous stories are circulated and believed, and headway is made very slowly.

DRIVING CONVEYOR FROM ELEVATOR BOOT.

We present herewith an illustration of a conveyor drive. With this device the conveyor may be driven

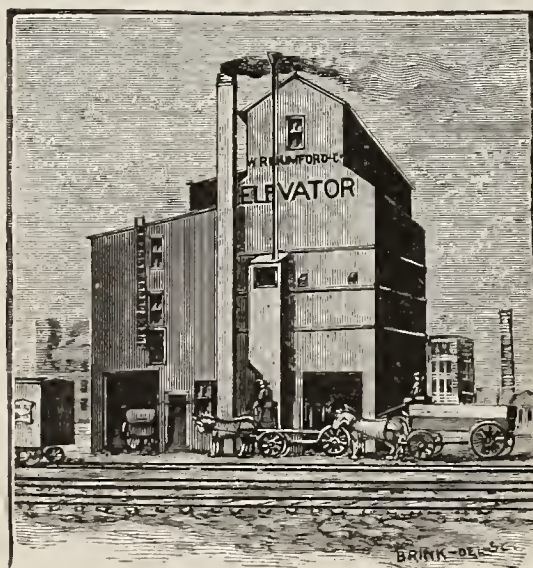


DRIVING CONVEYOR FROM ELEVATOR BOOT.

from the foot of the elevator, and in either direction when desired. This appliance is so simple that it needs no explanation to a practical elevator man.

THE ELEVATOR OF W. R. MUMFORD & CO. AT CHICAGO.

The illustration given herewith represents the city supply house of W. R. Mumford & Co., which is located at Thirty-second street and the Rock Island Railroad tracks. Only two-thirds of the building is



MUMFORD'S ELEVATOR AT CHICAGO.

shown in the illustration. The building as it now stands is 60x75 feet and has storage room for 35,000 bushels of grain, 30 carloads of millstuffs and 20 cars of hay. The building is what is called a studded house, and is roofed and sheeted with iron. Only the best material was used in its construction, and it stands as good now as when built five years ago. The grain is dropped into conveyors, carried to the elevators inside and run into a hopper scale and weighed. It is then conveyed to the bins. There are in all 22 bins for receiving grain. The power is furnished by a 10-horse power steam engine.

The machinery consists of oat clipper, corn sheller, Cyclone Dust Collector and a Willford & Northway feed mill. The oat clipper was made by the E. H. Pease Manufacturing Company and has a capacity of about 4,000 bushels per day. The corn sheller has a capacity of 2,000 bushels and the feed mill a capacity of about 20 tons per day. There are two shipping spouts for loading directly into cars from two shipping bins. The grain for shipment is cleaned and

conveyed to these bins, and thence transferred to the cars. Each floor of the elevator is supplied with fire extinguishers and in addition a large tank filled with water is located in the cupola to which water is conveyed in pipes by city pressure. The scale equipment consists of two platform, one hopper and two dormant scales.

The working force consists of an engineer, a foreman and two helpers who can take in and load out about ten carloads a day. The elevator has three driveways, only two of which are shown in the illustration. The driveways have large wagon scales located in the center. The grain or feed is spouted into the wagon on the scales and loaded within five minutes, or the same stuff can be sacked and thrown onto the wagon from a raised platform, the greater part of the work being to tie the sacks. To facilitate filling shipping orders on other roads and for delivering to the city trade the company has eight teams with which they can handle about a carload with each team a day. They are thus enabled to fill all orders promptly.

W. R. Mumford was one of the first members of the Board of Trade and started a city jobbing trade twenty years ago. About ten years ago he took in his present partners, J. O. Marsh and W. O. Mumford, and added the hay commission business. About six years ago the firm added the grain and seed commission, making a specialty of barley, rye and wheat. One year ago a shipping department was included so that they now do a general commission business in grain, seeds, hay and millstuffs, having in connection a shipping department of the same commodities. They also do a local and general jobbing business in feed dealers' supplies.

FORGED BILLS OF LADING.

Grain men of Kansas City, St. Louis, Memphis, Minneapolis, Chicago and other cities have been swindled out of considerable sums of money by a man calling himself J. D. Richland of the J. D. Richland Grain Commission Company, Kansas City, Mo.

About two months ago Richland made his appearance in Kansas City on the grain market as a local operator. He commenced business in the regular way, and his shipments came along all right for a time.

Mr. Richland's system of operation was as follows: He visited G. H. Dodge of the Brooks-Griffith Grain Company of Minneapolis with samples of No. 2 wheat, and contracted to sell twelve carloads at 47 cents. He claimed that the grain was to be shipped to him by E. L. Chotten & Co. of Bushon, Kan. Three days later he informed Mr. Dodge that the grain had been received and was ready for delivery. Richland handed him twelve bills of lading from Bushon, Kan., and four Missouri Grain Department inspection certificates. They appeared all right and Richland received a check for \$2,675, saying he would bring in the other inspection certificates on eight cars. He was not seen again. In about the same way various other firms were victimized to the tune of \$25,000.

The inspection certificates used by Richland were of the lithographed form in use by the department, and the signature of the railway company's agent at Kansas City was so perfect that the bills were accepted without question. How he obtained possession of the blanks is not known, and it is thought by some that he was a "dummy" of someone very familiar with the Kansas City business.

Chicago firms were the heaviest losers in Richland's game, the firms who were caught being Geo. A. Seaverns, Weare Commission Company, W. R. Mumford & Co., Norton & Worthington, Charles T. Peavey & Co., Counselman & Co. Some of the other firms are: The Brooks-Griffith Grain Company, Minneapolis; Union Pacific Elevator Company, Kansas City; C. H. Albers & Co., Annan, Burg & Co. and the Gratiot Street Warehouse Company of St. Louis, Mo.

Not a trace of J. D. Richland has been found since the discoveries of fraud, and about the only property left behind was his membership on 'Change. There is a reward offered of \$690 for his capture.

Leading financiers believe that wheat will never be higher than 75 cents. One reason given is that the Argentine Republic, which never exported wheat until two years ago, exported 32,000,000 bushels in 1893.

Queries and Replies.

Questions and answers are inserted under this head free of charge, and all are invited to avail themselves of this column.

No. 17. Plans for Small Elevator.—Wanted—Plans and suggestions for building a small elevator of, say, 5,000 to 7,000 bushels' capacity, with prices of machinery, lumber, etc., such as is generally used in same.—Address SAM C. SCOTT, New Waterford, Ohio.

No. 18. Who Makes the Thompson Drier?—Can some reader of the AMERICAN ELEVATOR AND GRAIN TRADE tell me where and by whom the Thompson Drier is made? Also, what is the nature of the machine, and does it give satisfactory results? Is it more expensive than other driers in first cost and in cost of operation? Any information will be appreciated.—A. O. P.

No. 19. Charge for Transfer; Fair Rental.—Will some one of your readers kindly inform us what elevator owners usually receive from railroad companies and others for transferring grain from car to car? Also, what would be a fair annual rental price to pay for the use of a transfer elevator with a storage capacity of 400,000 bushels and fitted with two feed grinders and two oat clippers?—COAL.

THE SYSTEM OF GRAIN INSPECTION; ITS ESTABLISHMENT AND GROWTH.

In the secretary's report for the year 1862 is recorded the fact that the board of directors decided to place more dependence upon the inspectors and to follow the rules describing the grades less closely. In that year the board adopted a rule to the effect that "whenever wheat shall be so dirty, or have so much of other grain mixed with it as to render it, in the judgment of the inspector, not equal to the grade its weight would indicate, it shall be graded according to its value, regardless of weight."

This shows very clearly how earnestly the Board of Trade worked to treat the interests of the seller and the buyer justly and with fairness. The same year it took another step to better guard these interests and adopted a resolution to the effect that "all wheat or mixtures of wheat or other grain too poor in quality, either by reason of being damaged, dirty, or from mixing for grading shall be marked as 'No Grade,' and we would recommend that warehouses do not receive such grain." Judging from this it seems that the grade of grain known as "skin grade" or "line grade" gave the buyers considerable uneasiness in 1862 as well as later, and the board attempted to discourage mixing in the warehouses.

The grain inspectors met with another difficulty in 1862 and that was "plugged" grain. The board attempted to discourage plugging by adopting a rule providing "that all grain arriving in bulk be inspected and received into the house for such grade only as the inspector shall decide, except when sold on track for grinding, city consumption or shipment, and the inspector shall in no case make the grade above the lowest quality found in any lot of grain, when it has evidently been mixed or 'doctored' with the view of changing the grade."

It seems that other attempts were made to deceive the inspectors this year, also to bribe them, for the board adopted a rule making it "the duty of all inspectors of grain to report to the inspection committee all attempts to defraud our inspection system. They shall report in writing every instance when warehousemen deliver or attempt to deliver grain of a lower grade than that called for by the warehouse receipt. [This is ample evidence that the warehousemen had attempted, if not succeeded, in giving out 'line grade' grain or grain of the next lower grade.] They shall also report any and every attempt of a receiver or shipper improperly to instruct or in any way influence the action or opinion of the inspectors, and also all other attempts to defraud the inspection system, and when the charges shall be sustained it shall be the duty of the inspection committee to put the same on the bulletin board of the exchange rooms."

The board seems to have doubted that warehouse-

men always loaded into vessel the grain which was intended for that cargo, so adopted a rule requiring all grain shipped from this port to be inspected on board. The board took farther steps to protect the trade from dishonest practices by the warehousemen by adopting the following resolution: "That it be the duty of the chief inspector to keep a record of the weight of grain inspected into and out of each warehouse, which record shall be open to the inspection of any member, and that he report daily to the secretary the average weight of the receipts and shipments of each grade into and out of each warehouse, which report shall be posted on the bulletin board." This would enable the inspection committee to detect any extensive reduction by mixing on the part of the warehousemen.

It is evidenced by the many rules adopted by the board that tricksters ever were alert to defraud and that the board tried to guard vigilantly the rights of all connected with the trade. T. T. Gurney succeeded Henry Cogger as chief grain inspector. The reports of the board for 1864 and 1865 do not show that he was influential in inaugurating any material changes or improvements.

A new rule governing the grading of corn was adopted in August, 1863, which contains the first reference to heated grain. It provides that "all wet or hot corn, or such as is in process of heating, or such as is unfit for manufacturing, to be passed no grade."

It seems the warehousemen ignored the board's recommendation that they decline to accept "No Grade" grain, so the board "respectfully and urgently requested all warehousemen not to receive it into their several elevators." Some of the warehousemen evidently were suspected of mixing.

An improvement was made in the duties required of inspectors which was intended to make them more careful and thoughtful in their work. The rule provided that "all inspectors must make their reasons for grading grain fully known by notations on their books."

No important changes were made in 1864, but the warehousemen were again "respectfully and urgently requested not to receive rejected grain into the several elevators," but it would seem that some of them were requested in vain.

The name of "No Grade" was changed to "Rejected" and an "Extra" grade of wheat provided for.

[TO BE CONTINUED.]

PUBLIC WAREHOUSEMEN SHOULD NOT DEAL IN GRAIN.

Many years ago the buying of grain brought by farmers to this city was done exclusively by the men who owned or operated the grain elevators. There was no speculative trade and no commission merchants. The grain was purchased "over the pile," in the absence of official grading, and held until the following spring, when it could be shipped eastward by the lake route. When the interior had been opened up by canal and railroad others than the warehousemen entered the field, and the result was the establishment of grades with authority to lose the identity of separate parcels of grain by putting them into bins with other parcels of the same grade. Then the war of the rebellion gave a powerful stimulus to speculation in grain and other commodities. Soon it became evident that the man acting as a public grain warehouseman would have a tremendous advantage over others if permitted to trade in competition with them, and an effort was made to prevent him from doing so. The storage of hog products by individual packers or packing companies has not been thus limited, but in their case there is not the same necessity for caution, as the identity of the different parcels is preserved by them and they have not the same opportunity for getting rich out of "mixing" and cleaning or delivering out the poorer kinds on orders while selling the choice articles on their own account, as in the case of grain.

In recent years the grain warehousemen have re-entered the field as buyers, and have reached out to numerous country points in competition with the commission merchants who make it their business to sell for others. These merchants complain to the Board of Trade that they cannot meet the unfair competition and ask the Board to interfere, while it is understood some of them intend to appeal to the law for

protection of their interests. The plea that they cannot do business under the new conditions is not a valid one, as the persons making it have no prescriptive rights to the business if others can do it more cheaply than they do. But the point made above is a very strong one in favor of their appeal for interference, though they seem to have ignored it in the pending discussion. It is the one on which they must win their case, if at all.

Acting as public custodian of valuable property which is bought and sold on an open market daily, and having the right to destroy the identity of each separate parcel of such property that is committed to his charge, the warehouseman has powerful temptations to defraud, and the facilities for doing so on a large scale, without detection, if he buys grain to go into the same warehouse as his own property and sells out equal quantities to shippers. It is in his power to select the poorest of the grain that will pass as in a named grade, and deliver that out to holders of the receipts he has issued in his capacity as a public warehouseman, ship out the best on his own account, or sell it at a premium in the home market. By doing this he would not only render outside competition by commission merchants impossible, but commit a fraud upon the average producer by abstracting from the property a profit of an unknown number of cents on the dollar, in addition to the warehouse charges allowed by law. This because the price of the grain in the open market would be fixed according to the quality of the poorest stuff passing muster in a given grade, while this price was used as the basis for buying a better average quality from the farmer. He can operate this steal without detection, unless informed on by some employe, as was the case when Munn & Scott put false bottoms into their wheat bins, and in other ways he has the power to crib and filch from the trade. The fact that all this would operate to the disadvantage of an honest commission man trying to compete with it is a secondary argument in favor of forbidding the practices noted, but is far from being the strongest plea to be urged against them.

There should be no objection to the warehouseman operating his establishment on the private plan and getting out of the business all he can, even though that should entail a retirement by those who do not operate warehouses for grain. But to allow them to buy and sell the property committed by others to their keeping, to substitute for it other property which is not of equal value, or even to have the opportunity of doing so without detection or redress, is dangerous. It is fraught with the possibility of so much evil that it should not be permitted if there be any means of preventing it by law. As to the possibility of such prevention, that is an open question to be agitated on the Board, perhaps argued in the courts, and submitted to action by the legislature. It is not always easy to prevent the commission of acts which all but the perpetrators admit to be wrong.—*Chicago Tribune.*

WILL CLEAN IN TRANSIT AT MINNEAPOLIS.

The lines extending eastwardly from Minneapolis at a meeting held some days ago adopted the following resolution as to cleaning in transit:

Resolved, That on and after March 1, 1894, the Chicago, Milwaukee & St. Paul will permit the cleaning in transit of grain at Minneapolis subject to the following conditions: Cleaning in transit of grain originating on the lines of the Chicago, Milwaukee & St. Paul will only be permitted at Minneapolis at elevators located on the lines of the Chicago, Milwaukee & St. Paul Railway at that point. Shipment of grain on transit account from Minneapolis will only be permitted on such shipments as are loaded out of the particular elevator at which grain is cleaned, it being understood that the grain must be shipped out within ten days after the receipt of the same in the elevator, or else the transit will be canceled.

It is agreed by all lines that no cleaning on transit account shall be created at Minneapolis on grain originating at points north and west thereof on the lines of the Great Northern, Northern Pacific, Minneapolis & St. Louis or "Soo" line, if they desire to do so, from permitting at elevators on their tracks in Minneapolis the cleaning in transit of grain originating on their own lines west of Minneapolis to be forwarded from that point over their respective lines.

COMMUNICATED

[We invite correspondence from every one in any way interested in the grain trade, on all topics connected therewith. We wish to see a general exchange of opinion on all subjects which pertain to the interest of the trade at large, or any branch of it.]

HAVE NOT SOLD.

Editor American Elevator and Grain Trade:—We note in your edition of February 15 that you mention our having sold our line of elevators to the Marfield Elevator Company of Winona. We wish to authorize you to correct this report, since we have not sold.

Yours truly, A. W. FALLGATTER & Co.

Minneapolis, Minn.

PUBLIC WAREHOUSEMEN SHOULD NOT DEAL IN GRAIN.

Editor American Elevator and Grain Trade:—As shippers of grain we feel that we should refrain from discussing the question of handling and owning grain by public warehousemen from a receiver's standpoint, but as shippers we think that as a class we have a just complaint against owners of public warehouses as being common owners of grain contained therein. We do not accuse all warehousemen of doing it, but it is an easy matter to give shippers on their receipts the poorest of every grade in the house and keep the best against their own receipts. Not only this, but it has a tendency to keep the grain in elevators when it is actually wanted by shippers at the market price to fill sales for shipment.

We think that the practice of elevator owners being owners of grain therein is against public policy and should be abolished.

Yours truly, ILLINOISAN.

THE TARIFF ON IMPORTED HAY.

Editor American Elevator and Grain Trade:—We view with alarm the proposed reduction of the tariff on hay from \$4 per ton to \$2 per ton as is made by the Wilson bill, which has already passed the lower house of Congress and is now before the Senate finance committee, and we would request every reader of your journal to cut out the petition below, and after pasting it at the head of a blank sheet of paper to personally circulate it, and get every hay man, both dealer and producer, in his vicinity to sign it, and to immediately return it to the undersigned. As the time for action is very short we earnestly request that no time be lost.

PETITION TO RETAIN THE PRESENT TARIFF ON HAY.

We, the undersigned, producers of and dealers in hay throughout the United States, are unanimously in favor of the present tariff on hay, and it is our firm belief that the best interests of the hay dealers and producers in general will be served by its continuance. We do further most earnestly petition the Congress of the United States to make no change in the same, as is proposed by the Wilson bill now before it.

Yours truly, W. D. TURNER,
Secretary Interstate Hay Association.

A MANITOBA GRAIN MARKET.

Editor American Elevator and Grain Trade:—Thinking some of your readers would be interested in news from this country I send you a few lines.

Brandon is a city about 140 miles north of Winnipeg on the main line of the Canadian Pacific Railroad, with a population of 5,500. There are four railroad lines running into the city, and the Assiniboine River runs through a valley at the north end. The city has good electric light service, first-class water works and sewers and good streets.

Brandon is one of the largest grain markets in the province. It has seven elevators with a total storage capacity of about 300,000 bushels, belonging to the following firms: Parrish & Lindsay, Alexander Kelly & Co., D. H. McMillan & Co., Ogilvie Milling Company, F. H. Hesson, Northern Elevator Company and the Farmers' Elevator Company. Beside the above there is a flour mill with a capacity of 250 barrels per day.

The grain is principally marketed in the fall, therefore the farmers are not affected by the recent decline in the market. The dealers also are pretty well sold

out, but are holding for May shipment. The farmers who have gone into mixed farming are very comfortable, and when the wheat gets below paying figures they feed wheat to their stock, thereby making good money out of it.

MANITOBA.

OUR BOSTON LETTER.

Editor American Elevator and Grain Trade:—We have had fair business for the past month, with good business at the present writing. The trade in oats the past week has been heavy, with markets active. The trade in spot stuff has been good lately, especially in oats, at prices over stuff for shipment. The stock in the elevators has been reduced about 410,000 bushels, although the present stock exceeds that at the same time last year by over 1,480,000 bushels. If the present spring weather continues in the West, receipts there will probably continue light, and spot market here will continue steady.

RECEIPTS FOR FEBRUARY.

Articles.	1894.	1893.
Cotton Seed Meal, tons.....	269	1,354
Corn, bushels.....	657,134	743,013
Wheat, bushels.....	6,809	40,661
Oats, bushels.....	223,940	346,238
Rye, bushels.....	2,330	1,030
Mill Feed, tons.....	1,416	946
Oatmeal, sacks.....	3,110	5,275
Oatmeal, barrels.....	4,189	3,874
Cornmeal, barrels.....	5,787	12,029
Barley, bushels.....	22,985	72,145
Malt, bushels.....	74,421	61,870
Hops, bales.....		
Peas, bushels.....	579	381
Buckwheat, bushels.....	11,281	30,281
Flour, barrels.....	72,748	98,764
Flour, sacks.....	146,091	134,848
Hay, cars.....	2,207	1,323
Straw, cars.....	59	56

EXPORTS FOR FEBRUARY.

Articles.	1894.	1893.
Wheat, bushels.....	270,961	75,414
Corn, bushels.....	664,519	476,693
Oats, bushels.....	1,050	194,701
Peas, bushels.....		42,997
Barley, bushels.....		17,258
Buckwheat, bushels.....		33,774
Cornmeal, barrels.....	2,140	2,875
Oatmeal, barrels.....	43	1,600
Oatmeal, sacks.....		
Flour, sacks.....	8,486	8,281
Flour, barrels.....	21,413	54,002
Mill Feed, sacks.....	2,524	10,835
Hay, bales.....	57,294	25,635

The stock of peas in elevators March 5 was 110, against 26,929 March 6, 1893. The stock of buckwheat was 9,654 bushels, against 7,595 on March 6, 1893.

BUNKER HILL.

THE INTERNATIONAL GRAIN TRADE FOR JANUARY.

Editor American Elevator and Grain Trade:—In January business was as flat as for some time past, and the hopes that some have entertained for an improvement in business in the new year have vanished. Neither unfavorable seeding reports nor a diminishing of stocks could influence business. In France, stocks increased largely and purchases of importance were made, as it grew more and more apparent that the duty on wheat would be raised. It is thought that in December and January France imported about 2,000,000 quarters of wheat. This amount, with the addition of the 2,500,000 quarters on which duty was paid since the beginning of the new season and the 2,000,000 quarters which are in transit, it is thought will represent the amount France will need to import for this year. Therefore, for the remainder of this year France will not be an important buyer.

Much of the wheat on passage for England was sold to France, and accordingly the former country had to consume more and more stocks which diminished from 3,500,000 quarters at the beginning of the year to about 2,750,000 quarters at the end of January. The English holders of wheat who had been waiting a long time for the occasion for selling were glad they could sell at least a part of their stock.

Concerning Argentine, previous favorable reports could only be confirmed, and there is no doubt but that there will remain for export 7,000,000 to 8,000,000 quarters. However, stocks are said not to have turned out as well as it was supposed they would. Bad reports are published about the maize crops in the same country.

In the East Indies, although the country had a very

good crop, exports have not been very large. It seems that continental prices do not attract exporters there. As to Russia, all reports confirm the enormous stocks of all kinds of grain. In Antwerp the stocks at the end of January were 80,000 quarters, against 115,000 for the same time last year. From foreign offers only those of La Plata wheat found buyers. In Berlin business was very small and only a few transactions were made in La Plata wheat, especially for future deliveries. Stocks are nearly all the same as before.

Truly yours, MUNLE & HERZ.
Hamburg, Germany, February 26.

DEFENDS PUBLIC WAREHOUSEMEN.

Editor American Elevator and Grain Trade:—In regard to the handling of grain by public elevators, and how it would affect the grain trade, etc., I will say that in my opinion we want free trade in the grain business, debarring all duties, that by so doing the producer receives the benefit and obtains the most money for his product. Cut out the middlemen and bring the producer and consumer as near together as possible, that the larger number may receive the benefit to the expense of the few. It has been evident for the past five years that large receivers or elevator men would ultimately buy of the producer (or middlemen at country points) and sell to the consumer, which we regard as legitimate.

We have state inspection, which is protection to a buyer, and no public elevator can turn out a lower for a higher grade. Hence there is no detriment to the trade in that direction. There always will be cleaners and mixers of grain, whether by public or private elevators, and if it is done under one elevator it cheapens the cost of transportation from one elevator to another, and can be sold to the consumer the cost less and the results to the producer more.

The adversities of business are various, and why should a receiver be protected in his business by the enactment of any law or by restricting other enterprises for his benefit? A country shipper does not suffer from the fact that the elevator men bid for the grain full up, cutting out the commissions. It is a benefit to him and enables him to pay the producer more. No, a state law would not stop the buying by elevator men. If such a law were passed they would buy through a third party, and so conduct their business that the law would be evaded.

There is a large elevator interest in our city and a vast amount of capital invested, and it is for the interest of this business and for the interest of the city that we accommodate grain here where buyers can get the various grades and in any quantities. This is the great center of the grain-producing Northwest, and why should we cripple the business of those who are instrumental in making it such?

I see no action which a receiver can take to benefit himself. If he is no longer needed in that line of business he must fall in line with the great majority and look for something else to do. One cannot legislate business to himself.

Yours, B. FOWLER.
Chicago, Ill.

REASONS WHY KANSAS DEALERS SHOULD ORGANIZE.

Editor American Elevator and Grain Trade:—I read with considerable interest the article in the last number of the AMERICAN ELEVATOR AND GRAIN TRADE headed "Trade Organization," in which you refer to the suggestion of a Kansas correspondent. There is no business in which trade organization is needed more and practiced less than in the grain trade. The general feeling among its members appears to be anything to get ahead of and to down your competitor, and they entirely overlook the old and practical doctrine that in union there is strength.

We in Kansas have, I think, a little more to contend with than the majority of grain dealers located further East. Not having any direct water communication, and in many places no railroad competition, we are often discriminated against in the matter of freight rates. There is another important reason why Kansas grain dealers should organize. At the last session of the legislature there was a law passed to compel railroad companies to put in scales and weigh grain, giving a clean bill of lading for exact contents

of the car and holding the railroad company responsible for the same.

The railroad companies have agreed to accept sworn statements of shippers (at points where they have no scales) where such shipments are made to points within the state of Kansas. There is probably not 10 per cent. of our shipments made to points within the state. I am informed that this law would apply to shipments made anywhere. In order, however, to make this law become effective we should have a strong permanent organization behind it. I give below a list of names of those who, I think, would take an active part in forming a permanent organization of grain dealers in Kansas:

H. C. Hodge, Wichita; Jos. Lutzshaw, Wilson; H. J. Neumiller, Solomon; E. L. Chatton, Bushton; Taylor Miller, Salina; I. M. Yost, Hays City; A. J. Poor, Chapman; S. M. Sanford, Minneapolis; A. C. Plumb, Lyons; W. K. Falks, Wellington; A. W. Wickham, Salina; S. S. Reynolds, Grainfield; all of Kansas.

My idea of the object of the organization would be as follows: First, for the better enforcement of our scale law; second, for the mutual benefit and protection of the grain interests in general. I would suggest Salina as the place of the first meeting. I am sorry to say that I cannot give you any information regarding the proposed meeting at Wichita.

I would be pleased to hear the opinion of others on this subject.

Respectfully yours, H. WORK.
Ellsworth, Kan.

WHY PUBLIC WAREHOUSEMEN SHOULD NOT OWN STORED GRAIN.

Editor American Elevator and Grain Trade:—By allowing public warehouse men to buy from the West and sell to the East, both shippers from the West and buyers East, as well as dealers in grain in Chicago, are bound to get the worst of it all around. It would be to the elevator men's interest to have all grain received and graded as low as possible, thereby lessening cost to them. This grain would then be handled through cleaning houses (of which nearly every regular house has one or more), reloaded into cars, regraded to top notch and unloaded into the regular house as contract grade. By so handling the grain Western shippers are bound to get paid for their shipments just as little as possible.

In bidding on track the warehousemen will have to make a price for No. 2 grade, a lower price for No. 3, and a still lower price for No. 4. Should a car arrive and grade No. 2 by a small margin, it would be to warehousemen's advantage to have the car regraded and have a lower grade put on it if possible. There is no reason to suppose they would not do this, as if they are going to buy, it stands to reason they are going to get their grain just as cheap as possible. On the other hand, when the car is reloaded from cleaning houses the grade is going to be established as high as possible. After it gets into regular house identity is lost, the grain being represented by warehouse receipts, which simply call for so many bushels of a certain grade of grain.

The way grain is graded in Chicago, wheat in particular, makes it possible for a warehouseman to whipsaw the market at all times. Take the present time, for instance, No. 2 spring wheat of hard variety will easily command from May price to 2 or 3 cents per bushel premium over May. If a warehouse man sells some No. 2 spring wheat he is going to sell the best No. 2 spring wheat in the house, but if some common carrier should happen to want to unload 5,000 bushels No. 2 spring the chances are he would get a very inferior article of soft spring wheat, which would not be worth anything outside of its being contract grade wheat and suitable for speculative purposes.

It is not safe for any one to buy No. 2 spring wheat in Chicago expecting to get a choice article of spring wheat. It is not much of a trick for houses who handle immense quantities of grain to get inspections advantageous to themselves. After a carload is inspected into a regular house as No. 2 it must come out as No. 2. The entire handling of the grain being in the hands of one concern from the time it arrives until shipped out affords great possibilities for gain, and I do not wonder that warehousemen are going to try and gain control of the business. There are

millions in it, but I doubt very much if Western and Eastern dealers would submit to it.

As regards suggesting a remedy for the evils above mentioned I am somewhat in doubt. A suitable law should be passed forbidding public warehousemen to deal in grain except with members of the exchange to which they belong. A law so passed would compel warehousemen to conform with rules and regulations of such exchange, which regulations would be such as would protect shippers and buyers alike. The exchange being composed of commission men who are paid to take care of their Western trade and shippers who for their own interests have to look out for the Eastern end of the line, would undoubtedly form such rules as would be for the best interests of all parties concerned.

We do not believe a law could be passed prohibiting warehousemen from trading in grain altogether, as it is only natural they should be allowed to keep their houses filled as much as possible, and if they do not buy the receipts of grain for carrying charges no one else will unless market difference is such as will leave a profit after storage, interest and insurance are paid, which is not always the case.

It is easy to see that it will greatly injure Chicago's grain trade to allow public warehousemen to become buyers and sellers any more than they are at present. They cannot be blamed for wanting to keep their houses filled with grain, as they have a vast amount of money invested and must gain storage and elevation charges from some source to keep going. Some of our elevators, however, are making it a rule to keep the grain they have in store and not sell it when a legitimate demand exists for it. For instance, if a firm should want to load out a lot of contract wheat from Chicago they would have to go to one elevator firm to get such an amount at once. This elevator firm would not let the wheat go unless they could sell for 2 or 3 cents per bushel premium, which, of course, would prevent the shipper from trading. This has been and is being done all the time.

None of us have as yet heard of any of our elevator firms complaining of hard times. Their houses are all filled to overflowing and there are still a lot of speculators in the country who will buy wheat futures, paying good carrying charges to the elevator people for the privilege of so doing.

We do not think the elevator firms ought to try to infringe upon the commission man's business. There is enough money on the Board of Trade outside of the elevator firms which is invested in the grain business and is going to stay in the grain business. The elevator people can hinder these firms and possibly make some difference in their profits, but we do not think they can do away with the commission man altogether. The Western shipper, by dealing with the elevator men direct, takes away his only chance for representation on the market. The commission men have to protect their Western shippers' interests in order to keep the business, and should they at any time fail in this duty the shippers would undoubtedly commence to sell their grain to whoever they got the best price from.

We do not think there is any great danger of the elevator people absorbing the commission man's business for some time to come, if at all.

Respectfully, RIALTO.

There has been a considerable amount of clover seed marketed in Mankato, Minn., for which good prices were paid.

The point of interest in the wheat market is the government report of the quantity in farmers' hands of 114,000,000 bushels. We don't mind saying that it was a disappointment to us, as we want to be loyal to the powers that are commissioned to make these reports, and on the basis of previous reports we could not discover where the wheat was. We hope we now have a starting point that will be a safe guide for the future. The report is considered bearish by the majority of dealers. We desire to honor the reports of the government. They ought to be the best we have. We presume the report of Saturday last is an approximation to accuracy, but that admission stamps the statement of March 10, 1893, as inaccurate, because by our statement of Saturday, based on that report, it was proved that the farmers now had no wheat.—*Toledo Market Report.*

SCREENINGS.

The Calumet Grain Trimmers' Union of South Chicago was recently incorporated.

The Secretary of Agriculture has sent to Kingston, Ont., for samples of Bay of Quinte barley for seeding purposes.

Instructress—"Now, Willie, what do you suppose saved Moses among the bulrushes?" Willie (son of a Board of Trade operator)—"He must have been long on something."

Mrs. Bale Hay, seeing the Black Crook for the first time—Oh, Hiram, let's go! I don't believe they've any clothes on!" Mr. Bale Hay, also his first time—"Wait; let's see."

PARRISH & LINDSAY, Brandon, Man.: "We are very much pleased with the matter contained in the AMERICAN ELEVATOR AND GRAIN TRADE, and think every grain man should have it."

The total number of bushels of wheat inspected (both in and out) in Chicago during the year ending Oct. 31, 1893, was 374,058,787, being 30,656,115 bushels less than for the same period in 1892.

H. C. King of Madelia, Minn., says that he marketed two loads of timothy and clover seed recently which brought him \$500. There is some difference between that and wheat at 40 or 50 cents per bushel.

The Northern Pacific Railroad has agreed to carry wheat, barley, rye and flax intended for seed at half tariff rates until June 1, between points on its line, on the certificate of the shipper that it is to be used for seed only.

The 20-cent tariff on grain shipped East from Chicago, which was recently put into effect, is not being maintained, and it is alleged that shipments have been made during the last day or two at 17½ cents per 100 pounds.

The ingenious youngsters of Flint, Mich., have contrived a new scheme by which to emancipate their country from the tyranny of the English sparrow. They soak wheat in strychnine and lure the guileless sparrow to its last supper. The birds are killed by hundreds.

Hay raisers and shippers are their own worst enemies. When a shipper keeps subsidizing a railroad company with low quality hay, stuffing further an already over-crowded market and putting a dead weight on prices, he is the railroad company's friend and his own worst enemy.—*Hay There.*

The grain men of St. Joseph, Mo., claim that they cannot possibly handle grain for St. Louis under the present rates. Formerly the Grand Island road made a through rate on grain from the point of shipment to St. Louis; but a new schedule makes a local rate of 13 cents, and does not provide for pro rata with other roads.

The Donau Brewing Company of Tacoma, Wash., is drying 2,000 bushels of wet wheat daily. The wheat in its damp state would sell for about 12 cents per bushel for export, being practically unmerchantable for flour making purposes; but when subjected to the drying process it is said to be worth from 38 to 40 cents a bushel.

During the month of February 1,354,526 bushels of corn were exported from the port of New Orleans, La., according to the report of Robert McMillan, chief inspector of the New Orleans Board of Trade, Limited, compared with 763,201 in February of 1893. During the same month 353,099 bushels of wheat were exported in 1894, compared with 1,989,790 exported in February, 1893.

There was no linseed or flaxseed imported during January, against 11,951 bushels, valued at \$16,479, imported during January, 1893; and during the seven months ending with January 121,418 bushels, valued at \$129,684, were imported, against 27,858 bushels, valued at \$39,148, imported during the seven months ending with January, 1893. All other seeds valued at \$76,369 were imported in January, against an amount valued at \$122,946 in January, 1893; and during the seven months ending with January an amount valued at \$276,442 was imported, against an amount valued at \$342,919 imported during the seven months ending with January, 1893.

RANGE OF PRICES AT CHICAGO.

The daily range of prices for cash grain at Chicago since February 15 has been as follows:

[illegible]

For the week ending February 17 prime contract timothy sold at \$4.10@4.50 per cental; prime contract clover at \$8.70@14.60; Hungarian at \$1.47@2.00; German millet at \$0.85@1.60; buckwheat at \$1.00@1.60 per 100 pounds. No. 1 flax on track sold at \$1.23¹/₂@1.39¹/₂. The receipts of hay for the week were 5,590 tons, against 4,643 tons for the previous week. Shipments for the week were 636 tons, against 826 tons for the previous week. A dull and heavy feeling prevailed. The offerings were liberal and demand only moderate. The inquiry for shipment was extremely light. Sales of No. 1 timothy ranged at \$9.75@10.75; No. 2, \$9.00@9.50; mixed, \$8.00; not graded, \$8.50@10.00; threshed, \$7.00; Illinois upland prairie, \$6.00; Wisconsin, \$4.00; Iowa, \$6.00@7.50 for fair to choice, and \$7.75@8.00 for fancy; packing hay, \$4.00@4.75. Wheat straw sold at \$1.00@6.00; oat straw at \$5.50, and rye straw at \$7.25@8.00.

For the week ending February 24 prime contract timothy sold at \$4.10@4.49 per cental; prime contract clover at \$9.00@13.60; Hungarian at \$1.50@2.10; German millet at \$0.85@1.60; buckwheat at \$1.00@1.50 per 100 pounds. No. 1 flax on track sold at \$1.20@1.39 $\frac{1}{2}$. The receipts of hay for the week were 4,275 tons, against 5,590 tons the previous week. Shipments for the week were 850 tons, against 636 tons for the previous week. The market for both timothy and upland prairie ruled dull. Arrivals moderate and demand light. The bulk of the offerings consisted of coarse off color and medium grades, which had a depressing influence. The demand was almost entirely for choice grades. Sales of No. 1 timothy ranged at \$10.00@10.50; No. 2, \$8.50@9.50 mixed, \$7.00@8.00; not graded, \$8.25@9.50; threshed, \$6.50; clover hay, \$6.50; Indiana upland prairie, \$5.00; Dakota, \$6.00; Wisconsin, \$5.50@6.00; Iowa, \$5.75@6.50 for poor to good, and \$7.00@7.50 for choice to fancy; packing hay, \$4.50. Wheat straw sold at \$5.25@6.00; oat straw at \$4.50@5.50, and rye straw at \$6.50@7.75.

For week ending March 3 prime contract timothy sold at \$4.10@4.44 per cental; prime contract clover at \$8.80@14.25; Hungarian at \$1.50@2.10; German millet at \$0.85@1.60; buckwheat at \$1.15@1.50 per 100 pounds. No. 1 flax on track sold at \$1.22@1.39½. The receipts of hay for the week were 6,180 tons, against 4,275 tons the previous week. Shipments for the week were 1,228 tons, against 850 tons for the previous week. The market ruled dull during the week. The arrivals were liberal and demand only fair. Scarcely any inquiry for shipment and trade almost entirely local. Strictly choice grades were in light request and prices exhibited no material change, while the poorer qualities were almost unsalable, with prices irregular. Sales of No. 1 timothy ranged at \$9.50@10.00 for fair to good, and \$10.25@10.75 for choice to fancy; No. 2, \$8.00@8.75; mixed, \$6.50@7.50; not graded, \$8.00@9.50; threshed, \$5.75; clover hay, \$8.00; Illinois upland prairie, \$5.50; Indiana, \$5.00@6.00; Wisconsin, \$7.00; Iowa, \$4.25 for coarse, \$6.00@6.50 for fair to good, and \$7.00@7.75 for choice to fancy; packing hay, \$4.50@5.25. Wheat straw sold at \$4.25@5.25; oat straw at \$5.00, and rye straw at \$6.75@7.00.

For the week ending March 10, prime contract timothy sold at \$4.10@4.44; prime contract clover at \$8.70@13.35; Hungarian at \$1.50@2.10; German millet at \$0.80@1.40; buckwheat at \$1.10@1.40 per 100 pounds. No. 1 flax on track sold at \$1.20@1.37. The receipts of hay for the week were 6,262 tons, against 6,180 tons for the previous week. Shipments for the week were 858 tons, against 1,228 tons for the previous week. No improvement was noticed.

Fancy, bright was in fair local demand, but poor hay was extremely dull, and receivers found it almost impossible to effect sales. Sales of No. 1 timothy ranged at \$9.50@10.00 for fair to good, and \$10.25@10.50 for choice to fancy; No. 2 \$8.25@9.00; mixed, \$6.50@8.00; not graded, \$7.50@9.50; clover hay, \$4.00@7.00; Indiana upland prairie, \$5.00; Dakota \$5.50@6.50; Iowa \$5.50@6.50 for fair to good, and \$7.00@8.25 for choice to fancy; No. 1 prairie, \$5.75@6.00; packing hay, \$4.75. Wheat straw sold at \$4.00@4.50, oat straw at \$4.00@4.50, and rye straw at \$6.75@7.25.

FLAXSEED AT CHICAGO.

The receipts and shipments of flaxseed at Chicago during the first 7 months, of the two last crop years, as reported by S. H. Stevens, flaxseed inspector of the Board of Trade, were as follows:

Months.	Receipts.		Shipments.	
	1893-94.	1892-93.	1893-94.	1892-93.
August	414,700	729,300	341,606	1,009,113
September	1,881,550	761,750	1,195,733	974,668
October	2,340,800	1,452,000	1,810,110	1,150,685
November	1,178,650	1,395,350	887,708	1,365,880
December	493,900	743,050	383,932	228,060
January	183,700	396,550	186,674	323,261
February	59,400	187,550	142,645	232,555
March				
April				
May				
June				
July				
Total	6,552,700	5,665,550	4,948,408	5,284,222

RECEIPTS AND SHIPMENTS AT ST. LOUIS.

The receipts and shipments of grain and hay at St. Louis, Mo., during the month of February, as compared with the same period of the preceding year, were, according to Geo. H. Morgan, secretary of the Merchants' Exchange, as follows;

Articles.	Receipts.		Shipments.	
	1894.	1893.	1894.	1893.
Wheat, bushels.....	163,800	759,200	401,514	887,963
Corn, bushels.....	2,817,500	4,011,000	1,861,752	3,700,010
Oats, bushels.....	545,600	508,200	309,285	274,465
Barley, bushels.....	144,000	155,250	9,039	21,764
Rye, bushels.....	16,800	101,500	10,064	122,480
Hay, tons.....	13,995	10,675	3,488	2,772
Flour, barrels.....	83,920	127,421	157,075	174,284
Bran, cars.....	35	45	95	63
Bran, sacks.....	25,185	32,940	48,305	66,653

RECEIPTS AND SHIPMENTS AT DULUTH.

The receipts and shipments of grain and hay at Duluth, Minn., during the four weeks ending March 3, as compared with the same period of the preceding year, were, according to Frank E. Wyman, secretary of the Board of Trade, as follows:

Articles.	Receipts.		Shipments.	
	1894.	1893.	1894.	1893.
Wheat, bushels...	1,023,749	236,496	75,207	15,877
Corn, bushels....	69,478	30,478		
Oats, bushels....	6,267		11,945	
Barley, bushels...	833		2,120	
Rye, bushels.....	1,132			
Flaxseed, bushels.	1,133	374		374
Flour, barrels....	24,050	11,460	82,841	66,001
Flour produced...	74,903	64,944		

RECEIPTS AND SHIPMENTS AT PEORIA.

The receipts and shipments of grain and hay at Peoria, Ill., during the 4 weeks ending March 3, as compared with the same period of the preceding year, were, according to R. C. Grier, secretary of the Board of Trade, as follows:

Articles.	Receipts.		Shipments.	
	1894.	1893.	1894.	1893.
Wheat, bushels.....	40,200	129,050	18,000	73,980
Corn, bushels.....	1,887,350	925,750	552,910	551,750
Oats, bushels.....	1,183,600	1,082,500	902,000	1,140,300
Barley, bushels.....	175,700	91,700	134,000	6,500
Rye, bushels.....	13,800	12,600	4,800	78,400
Mill Feed, tons.....	297	177	4,861	2,553
Hay, tons.....	10,550	3,410	2,065	1,723
Flour, barrels.....	16,650	21,600	14,700	19,550
Spirits & Liquors, bbls.	3,680	176	22,903	18,840
Syrup & Glucose, bbls.	1,200	1,840	40,170	18,824

RECEIPTS AND SHIPMENTS AT KANSAS CITY.

The receipts and shipments of grain and hay at Kansas City, Mo., during the 4 weeks ending March 3, as compared with the same period of the preceding year, were, according to W. D. Charde, secretary of the Commercial Exchange, as follows:

Articles.	Receipts.		Shipments.	
	1894.	1893.	1894.	1893.
Wheat, bushels ..	792,600	1,645,200		
Corn, bushels....	1,214,500	1,405,600		
Oats, bushels	234,000	366,000		
Barley, bushels....	1,800	7,200		
Rye, bushels.....	4,200	46,800		
Flaxseed, bushels				
Hay, tons.....	4,330	3,460		
Bran, cars.....				

RECEIPTS AND SHIPMENTS AT MILWAUKEE.

The receipts and shipments of grain and hay at Milwaukee, Wis., during the 4 weeks ending March 3, as compared with the same period of the preceding year, were, according to Wm. J. Langson, secretary of the Chamber of Commerce, as follows:

Articles.	Receipts.		Shipments.	
	1894.	1893.	1894.	1893.
Wheat, bushels.....	858,715	785,050	84,883	139,950
Corn, bushels.....	141,000	167,350	27,300	38,113
Oats, bushels.....	396,000	533,094	327,940	234,280
Barley, busbels.....	1,085,875	694,200	407,698	259,505
Rye, bushels.....	66,000	123,800	42,399	63,000
Grass seed, pounds.	375,335	81,680	470,582	209,810
Flaxseed, bushels..	9,498	12,520	1,740	10,800
Hay, tons.....	950	1,189	36	34
Flour, barrels.....	194,025	64,605	223,089	177,396

RECEIPTS AND SHIPMENTS AT TOLEDO.

The receipts and shipments of grain and hay at Toledo, O., during the four weeks ending March 3, as compared with the same period of the preceding year, were, according to Denison B. Smith, secretary of the Produce Exchange, as follows:

Articles.	Receipts.		Shipments.	
	1894.	1893.	1894.	1893.
Wheat, bushels.....	308,000	299,000	26,600	107,000
Corn, bushels.....	335,700	601,000	152,600	376,000
Oats, bushels.....	5,500	13,000	4,000	9,000
Barley, bushels.....	500	11,000	1,000	17,000
Rye, bushels.....	6,200	2,000	7,600	3,000
Grass seed, bags.....	7,800	5,562	13,197	10,404
Flour, barrels.....	6,978	6,562	34,478	39,386

RECEIPTS AND SHIPMENTS AT MINNEAPOLIS.

The receipts and shipments of grain and hay at Minneapolis, Minn., during the 4 weeks ending March 3, as compared with the same period of the preceding year, were, according to G. D. Rogers, secretary of the Chamber of Commerce, as follows:

Articles.	Receipts.		Shipments	
	1894.	1893.	1894.	1893.
Wheat, bushels.....	3,113,910	4,024,050	763,540	713,000
Corn, bushels.....	780,690	448,830	637,450	313,720
Oats, bushels.....	221,210	336,080	102,140	150,600
Barley, bushels.....	25,880	104,560	38,200	76,610
Rye, bushels.....	9,350	5,820	2,950	3,110
Flaxseed, bushels....	7,240	24,710	28,290	12,180
Hay, tons.....	2,637	3,187	49	74
Flour, barrels.....	12,725	39,400	502,533	634,924

RECEIPTS AND SHIPMENTS AT DETROIT.

The receipts and shipments of grain and hay at Detroit, Mich., during the 4 weeks ending March 3, as compared with the same period of the preceding year, were, according to Geo. M. Lane, secretary of the Board of Trade, as follows:

Articles.	Receipts.		Shipments.	
	1894.	1893.	1894.	1893.
Wheat, bushels.....	286,436	365,599	15,105	162,774
Corn, bushels.....	175,293	227,530	52,126	139,493
Oats, bushels.....	108,040	117,046	30,832	4,801
Barley, bushels.....	51,326	53,353	.....	29,891
Rye, bushels.....	3,892	12,596	1,811	11,507
Flour, barrels.....	10,587	13,543	6,209	11,942

RECEIPTS AND SHIPMENTS AT CHICAGO.

The following table, compiled by George F. Stone, secretary of the Board of Trade, shows the receipts and shipments at Chicago during February, 1891 and 1893, of seeds, hay and broom corn:

Repts.	Timothy lbs.	Clover lbs.	Other grass seeds, lbs.	Flax-seed, bu.	Broom corn, lbs.	Hay, tons.
1894 ..	2,108,728	611,810	281,679	63,233	871,950	20,334
1893 ..	624,481	627,503	290,497	143,706	1,402,060	19,008
Shipments ..						
1894 ..	3,342,565	2,241,312	836,162	80,077	714,119	3,600
1893 ..	4,397,227	1,059,331	354,576	251,092	1,772,594	3,688

WHEAT RECEIPTS AT PRIMARY MARKETS.

The wheat receipts at nine primary markets during the 36 weeks ending March 3, for the three last years, were as follows:

	1893-94.	1892-93.	1891-92.
St. Louis.....	11,344,000	24,003,000	23,872,000
Toledo.....	10,852,000	20,802,000	18,230,000
Detroit.....	7,299,000	6,982,000	6,371,000
Kansas City.....	11,302,000	23,449,000	12,141,000
Cincinnati.....	832,000	1,576,000	2,009,000
Winter wheat.....	41,628,000	76,812,000	62,623,000
Chicago.....	19,219,000	51,135,000	41,698,000
Milwaukee.....	8,817,000	11,287,000	9,190,000
Minneapolis.....	39,428,000	51,058,000	49,448,000
Duluth.....	28,275,000	34,033,000	37,819,000
Spring wheat.....	95,739,000	147,513,000	138,155,000
Total, 36 weeks.....	137,367,000	224,325,000	200,778,000

DESTINATION OF AMERICAN WHEAT EXPORTS.

The last report of the Bureau of Statistics shows that the destination of the wheat exported from the United States was as follows:

	Month ending Jan. 31.		Seven months ending Jan. 31.	
	1894.	1893.	1894.	1893.
United Kingd'm	3,667,038	6,622,192	35,960,040	50,952,759
Germany.....	66,478	40,353	1,153,368	1,922,177
France	1,184,106	616,725	7,701,582	3,178,018
Other countries in Europe....	1,018,046	1,486,886	15,834,020	16,039,486
Brit. North Am. Possessions...	14,523	.....	2,647,148	2,692,669
Cent. Am. states & Brit. Hond	4,420	2,000	21,230	31,756
West Indies and Bermuda.....	.....	270	8,477	4,444
Brazil.....	11	.....	47	47,916
Other countries S. America...	.....	766	2,980	7,701
Asia & Oceania.....	822	1,726	6,188	11,399
Africa.....	207	.....	85,879	80,002
Other countries	5	1,520	3,810	6,764
Total	5,955,656	8,762,438	63,424,769	74,975,091

DESTINATION OF OUR CORN EXPORTS.

The last report of the Bureau of Statistics shows the destination of the corn exported from this country to be as follows:

	Month ending Jan. 31.		Seven months ending Jan. 31.	
	1894. Bu.	1893. Bu.	1894. Bu.	1893. Bu.
United Kingdom.	4,847,538	1,514,336	14,939,950	8,771,548
Germany.....	1,527,767	199,991	6,435,803	2,766,145
France.....	378,239	137,300	1,142,355	309,258
Other countries in Europe.....	1,596,320	673,434	6,655,910	3,290,158
British North Am. Possessions....	177,521	64,011	7,661,793	2,213,537
Mexico.....	19,837	418,441	345,292	5,268,661
Cent. Am. States & Brit. Hond's	31,259	2,408	99,798	31,454
Cuba.....	54,713	75,700	671,536	585,745
Puerto Rico.....	1,940		4,999	8,944
Santo Domingo..		345	6	5,044
Other West Indies and Bermuda..	54,269	48,085	342,010	301,381
South America...	11,592	25,751	99,637	204,495
Other countries..	836	145	14,820	8,411
Total.....	\$,701,831	3,159,947	\$8,413,309	23,764,781

VISIBLE SUPPLY OF GRAIN.

The following table shows the visible supply of grain Saturday, March 10, 1894, as compiled by George F. Stone, secretary of the Chicago Board of Trade:

In Store at	Wheat, bu.	Corn, bu.	Oats, bu.	Rye, bu.	Barley, bu.
Albany.....		35,000	65,000	17,000	35,000
Baltimore.....	996,000	1,097,000	86,000	17,000	
Boston.....	736,000	666,000	20,000		19,000
Buffalo.....	1,400,000	456,000	53,000	52,000	228,000
do afloat.....	35,000	367,000	156,000		
Chicago.....	20,879,000	5,580,000	666,000	216,000	65,000
do afloat.....	1,422,000	6,857,000	209,000	1,000	114,000
Cincinnati.....	9,000	25,000	18,000	23,000	70,000
Detroit.....	1,817,000	36,000	11,000	1,000	9,000
do afloat.....	750,000				
Duluth.....	10,953,000	239,000	13,000	32,000	11,000
do afloat.....	209,000				
Indianapolis.....	132,000	61,000	42,000		
Kansas City.....	484,000	9,000	9,000	4,000	
Milwaukee.....	865,000		12,000	11,000	82,000
do afloat.....					
Minneapolis.....	12,075,000	549,000	32,000	27,000	55,000
Montreal.....	634,000	4,000	276,000	40,000	47,000
New York.....	12,592,000	578,000	547,000	48,000	9,000
do afloat.....	464,000				126,000
Oswego.....	20,000	19,000			30,000
Peoria.....	121,000	304,000	149,000	1,000	1,000
Philadelphia.....	280,000	58,000	53,000		
St. Louis.....	4,217,000	899,000	16,000	1,000	28,000
do afloat.....	100,000	99,000			
Toledo.....	3,046,000	1,158,000	6,000	7,000	
do afloat.....	140,000	151,000			
Toronto.....	131,000		47,000		47,000
On Canals.....					
On Lakes.....					
On Miss. River.....		187,000	3,000		
Grand total.....	74,507,000	19,347,000	2,489,000	498,000	976,000
Corresponding date, 1893.....	79,103,000	15,808,000	4,932,000	914,000	1,523,000

INSPECTED RECEIPTS AT CHICAGO.

According to the report of Chief Grain Inspector George P. Bunker the grain received at Chicago during the month of February, 1894, was graded as follows:

WINTER WHEAT.											
Railroad.	White.			Hard.			Red.				
	2	3	4	1	2	3	1	2	3	4	No Grade.
C., B. & Q.....	...	3	...	...	72	33	...	19	29	17	...
C., R. I. & P.....	...	2	...	...	9	24	...	1	10	8	...
C. & A.....	1	1	...	...	5	6	...	1	33	3	...
Illinois Central.	4	4	...	10	29	7	...
Freeport Div.	1	2	...	...
Galena Div. N.W	2	...	...	...	1	...
Wis. Div., N. W	...	1	...	...	...	...	...	18	3	1	...
Wabash.....	1	...	...	...	...	4	35	9	1
C. & E. I.....	7	14	3	...
C., M. & St. P..	...	3	...	...	4	2	...	1	19	2	1
Wis. Cent.....
C. Gr. Western.	5	...	...	1	1	1
A., T. & S. Fe..	...	2	...	...	29	23	...	40	53	41	3
Through & Spec	1	...	...	...	...	103	...	91	39	6	...
Total each grade	2	12	1	...	123	202	...	193	267	99	6
Total W. wheat.	906

SPRING WHEAT.									
Railroads.	Northern.	2	3	4	No Grade	White.		Mixed Wheat.	
						2	3	2	3
C., B. & Q.		30	52	7			2	1	1
C., R. I. & P.		2	5	2			1	1	3
C. & A.			2						
Illinois Central ..		1							
Freeport Div.			21	1					
Galena Div., N. W.			24	7					1
Wis. Div., N. W.									
Wabash		1	2						
C. & E. I.									
C., M. & St. P.			132		27				
Wis. Cent.				1					
C. Gr. Western		2	2						
A., T. & S. Fe.									
Through & Special.		61				11			
Total each grade ..		97	240	18	27	11	3	2	5
Total sp. wheat ..									403

	Yellow.	White.	2	3	4	No Grade.
Railroad.	2 3	2 3	2 3	2 3	2 3	2 3
C. B. & Q.....	104	289	36	59	699	613
C. R. I. & P.....	57	199	5	17	157	1,099
C. & A.....	8	143	5	40	12	87
Illinois Cent.....	43	442	22	71	15	94
Freeport Div.....	50	268	1	13	79	461
Gal. Div. N. W.....	5	707	1	31	33	1,301
Wis. Div. N. W.....	1	3		1		1
Wabash.....	28	296	4	122	2	109
C. & E. I.....	5	125	2	26	3	95
C. M. & St. P.....	3	338		7	47	927
Wis. Central.....						
C. G. Western.....	4	53	1	6	57	223
A. T. & S. Fe.....	3	192	3	16	23	228
Thrh'g & Spcl.....	3	216	12	66	6	38
Total each grade.....	314	3,271	92	475	1,133	5,267
Total corn.....						224
						10,796

OATS.

Railroad.	White.			2	3	White Clipped.		No Grade
	1	2	3			1	2	
C. B. & Q.....	305	133	86	29	2	3		
C. R. I. & P.....	147	100	48	25	8	2		
C. & A.....	63	4	40	8				
Illinois Central...	57	11	69	6				
Freeport Div.....	94	150	31	22		3		
Galena Div. N. W.	98	268	52	44				
Wis. Div. N. W....	59	96	3	3		2		
Wabash.....	48	3	30	5				
C. & E. I.....	38		28					
C. M. & St. P....	239	301	61	44				
Wisconsin Central.	3	11	1					
C. G. Western.....	20	55	17	21				
A. T. & S. Fe....	81	35	55	6				
Through & Special	45	15	23	11				
Total each grade.	1,297	1,182	544	224	10	10		
Total oats.....						3,267		

	1	2	3	No Grade.
Railroad.	1 2 3	1 2 3	1 2 3	1 2 3
C. B. & Q.....		11	2	
C. R. I. & P.....		3	2	
C. & A.....		2		
Illinois Central.....			1	
Freeport Div.....		8	3	
Galena Div. N. W.....		11	3	
Wisconsin Div. N. W.....		7	1	
Wabash.....				
C. & E. I.....				
C. M. & St. P.....		13		
Wisconsin Central.....		1	1	
C. G. Western.....			2	
A. T. & S. Fe.....		1	1	
Through & Special.....			1	
Total each grade.....		57	17	
Total rye.....				74

BARLEY.								
Railroad.	Bay Brewing.		2	3	4	5	No Grade.	Total No. Cars all grain by Roads.
	3	Chevalier.						
C. B. & Q.....			3	90	5	7		2,743
C. R. I. & P.....				11	8		1	1,996
C. & A.....								464
Illinois Central.....								898
Freeport Div.....				83	16	3	1	1,338
Galena Div. N. W.....		1		41	18	4	2	2,724
Wis. Div. N. W.....			4	345	52	17	27	645
Wabash.....								717
C. & E. I.....								358
C. M. & St. P.....			5	381	29	33	2	2,640
Wisconsin Central.....				9	9			36
C. G. Western.....				22	65	4		587
A. T. & S. Fe.....					1	1		849
Through & Spec'l.....					1	1		758
Total each grade.....			13	982	204	70	33	16,748
Total barley.....							1,202	

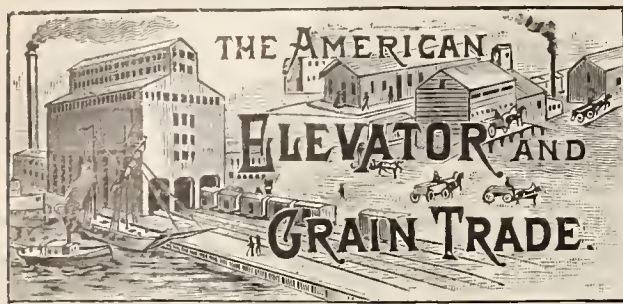
EXPORTS FROM ATLANTIC PORTS.

The exports of breadstuffs, as compiled by George F. Stone, secretary of the Chicago Board of Trade, from the Atlantic ports during the two weeks ending March 10, as compared with same weeks last year, have been as follows:

	For the week ending March 10.	For the week ending March 11.	For the week ending March 3.	For the week ending March 4.
	1894.	1893.	1894.	1893.
Wheat, bu.....	1,111,000	903,000	990,000	1,631,000
Corn.....	1,671,000	785,000	1,818,000	659,000
Oats.....	5,000	182,000	3,000	134,000
Rye.....		9,000		8,000
Flour, bbls.....	324,000	226,000	325,000	245,000

RECEIPTS AND SHIPMENTS AT SAN FRANCISCO.

The receipts and shipments of grain and hay at San Francisco during the month of February, as compared with the same period of the preceding year, were, according to T. C. Friedlander, secretary of the San Francisco Produce Exchange, as follows:



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HARLEY B. MITCHELL, - - - Editor.

ADVERTISING.

This paper has a large circulation among the elevator men and grain dealers of the country, and is the best medium in the United States for reaching this trade. Advertising rates made known upon application.

CORRESPONDENCE.

We solicit correspondence upon all topics of interest connected with the handling of grain or cognate subjects.

CHICAGO, ILL., MARCH 15, 1894.

WHY WHEAT IS CHEAP.

One reason why wheat remains at a low level is made apparent in the March report of the Department of Agriculture. If the report of the farmers' reserves of wheat at 115,000,000 is approximately correct, the figures of the department a year ago were 100,000,000 bushels out of the way. That the amount of wheat raised the past few years has been underestimated, nobody doubts. An underestimate of a hundred million bushels of wheat is not a slight matter.

It is no wonder that with a vast reserve out of sight, prices have sagged after every advance, because the wheat came out of hiding. Not to mention the new wheat fields of Russia and Argentine the department's estimates show that the prices based on a supposed scarcity were fictitious. Nor does there seem much prospect for better prices until there is less wheat in the country ready to come out at the first advance.

AN ARTISTIC MEMORIAL OF THE WORLD'S FAIR.

No event of recent years has made such an impression upon the American people as the World's Fair at Chicago. No one who saw it will wish to obliterate from his memory one of its pictures. For many years, perhaps for a century, it will live as the greatest exposition; for it is not likely that any community or government will very soon undertake the expenditure of over thirty million dollars with so little actual return in material results in sight.

Both those who attended the fair and those who did not would like some adequate picture of its beauties. The popularity of the many portfolios and memorials has been phenomenal, notwithstanding the fact that many of them are inferior as works of art. We have decided to offer our readers the best obtainable, and without the annoyance and child's play of "coupons." You need not mutilate your paper to get the portfolios we offer. All you have to do is to inclose 15 cents for each portfolio. There are sixteen in all, and you can get them all for \$1.75.

The views are the finest and the execution the best. The paper used is 110-pound plate paper. In the bound volumes 130-pound paper is used. The reader can get all necessary information from the advertisement on another page. After getting one of the portfolios, you will want them all. The 256 views make a panorama of the fair that is the best and most artistic memorial of the great exposition yet offered, and one which should grace every library and parlor in the land.

DYNAMITE IN OATS,

It is said "there is dynamite in oats." This is a very expensive adulterant, but the bulls are convinced that they are justified in using it. Old iron, stones, weeds and sticks are frequently used for this purpose by farmers, but their intense desire to get ahead of the country buyers has not yet prompted them to go to this extreme. However, the visible supply of oats is less than one-half what it was one year ago, or not quite 2,500,000 bushels. Although the price for choice oats is more per pound than wheat, country shippers seem loth to part with their holdings at present prices, while Eastern jobbers are anxious to buy.

The oats of contract grade in the Chicago elevators is claimed to be less than half a million (it surely cannot be much more) and the short interest twenty times that amount. So a corner in oats on the Chicago market is confidently expected by a number of Chicago dealers. It must be remembered that many of the Chicago elevators are equipped with cleaners, clippers and scourers, and that 1,500,000 bushels can easily be handled every day. It is a very difficult matter to run a corner now as compared with five years ago, because the cleaning houses are well equipped with machinery and in charge of men who are competent to raise or lower the grade of oats at will. The oat mixers have learned how to use screenings, oat hulls and barley to advantage, and very naturally they do not hesitate to mix in these adulterants as suits the wants of the trade. If a corner is run it is more than likely all contracts will be filled, or at least, most of them. Settlements will not be made by payment of cash, but by the delivery of oats.

A GOOD MOVE.

The general merchants of many country points are frequently overcome by selfishness, and during a period of nearsightedness, enter the local market in competition with the local grain buyers. The object being to attract farmers to the market so they can sell them large quantities of goods, the price of which is not, like prices of grain, printed in every daily paper published.

Frequently the scheme works well. The local dealers do not feel like retiring from business, so bid up for the grain, and often pay more for the grain than they can sell it for. This brings the farmers to market with a rush and the merchants add their loss on the grain bought to the price of goods sold to the farmer. The farmer soon sees through the merchants' game, the merchants get tired and the grain buyers are left in control of the market, but with a prejudice existing against them and the town as a grain market, which the local merchants helped to establish.

Sometimes, however, the local grain buyers refuse to be forced into paying more for grain than the market prices existing at grain centers justify, and such a case recently occurred at Munson, Iowa. The business men of that town combined and commenced to buy grain, paying therefore higher prices than they could afford, in hope of getting more of the farmers' trade. The regular buyers pulled up stakes and moved to towns where they could conduct their business without interference from local merchants. When the Munson merchants get tired of losing

money on grain they may seek to have the regular buyers return or try to get other buyers to locate at that point. They may try in vain, but they have themselves only to blame. A town with local merchants who are so selfish and near-sighted is a poor place for a grain buyer to locate. Many towns have given good bonuses to induce buyers to locate. Some have given farther assistance and attempted to protect and foster the business when established. The merchants of a Michigan town pays a firm of grain buyers 5 cents a bushel for all grain bought on the local market and shipped. This enables the buyers to draw considerable business from neighboring towns.

There is no money in the grain business when, in order to get it, buyers at country stations must pay more than the prices ruling at grain centers justify, and the sooner buyers withdraw from the markets where they have to pay unreasonable prices the sooner will their real value to the town be appreciated by the selfish merchants.

MAY TEST WHEAT IN HOGS-HEADS.

Many farmers in all parts of the country have profited recently by testing the feeding value of wheat in hogskins, and now the bucolic statesmen of Ohio have decided that all grain bought direct from producers must be tested in hogs-heads, or the next thing to it—a half-bushel measure.

As introduced, the bill provided for the testing of all grain in a half-bushel measure, but the dealers at central markets were organized, so were prepared to fight for their own interests, and had the bill amended so as not to affect their business. The dealers at country markets were not organized, so were unable to defend their rights, and the bill amended to strike direct at them as buyers has been passed by both houses of the State Legislature.

The law provides that when the farmer sells the grain shall be tested in a one-half-bushel measure, but when anyone else sells, it may be tested as desired. It will be a difficult matter to induce any court to uphold such a law.

The dealers of every state have much to gain and naught to lose by organizing strong and active associations. The Governor may have vetoed the bill, but had the Ohio dealers been well organized it would not have got so near the statute books.

TRACK SCALES FOR WEIGHING GRAIN IN IOWA.

A bill has been introduced in the Iowa Legislature providing that every railway company operating wholly or in part in that state shall, on or before July 1, 1895, construct and maintain track scales to weigh grain in earloads at every station on its line from which the aggregate of grain shipments on all railways shall be 100 ears or more of grain, seeds and hay. Each railway is to receive 25 cents per ear from shippers for weighing, and is required to furnish shippers with bills of lading in duplicate, and assume responsibility for the full amount of commodities delivered.

The Kansas Legislature enacted the same law last year, but it has not resulted in much, if any, benefit to shippers. A similar law has been on the Illinois statute books for years, but only once has any attempt been made to enforce it. The trouble in Illinois is the shippers do not care to gain the ill-will of the railroad companies over whose lines they slip.

The Kansas law gives the railroad the option of putting in track scales or accepting the sworn statement of shipper as to the amount of grain in ear as correct. The Kansas roads claim the law cannot be enforced on interstate shipments, and accept the sworn statements of shippers when grain is shipped to points within the state. They thereby avoid going to the expense of put-

ting in track scales and wiggle out of giving clean bills of lading for 90 per cent. of the grain shipped.

The federal courts decided some time ago that the state of Illinois could not compel the L. S. & M. S. Ry. to accept the weights of a Chicago elevator and give a clean bill of lading for the grain, because it is argued that would be an interference with interstate commerce, which is one of the exclusive powers of the federal government. The weighing of the grain has naught to do with interstate commerce, it is commenced and completed within the borders of the state, and the state has power to regulate it.

THE INTERSTATE COMMERCE LAW.

The decision of Judge Grosseup in the United States Court in this city last month shows that the Interstate Commerce act will have to be repaired by a master workman if it is to survive the wear and tear of actual operation. After the Counselman decision, it will be remembered, Congress amended the act so as to overcome the constitutional objection that the law required parties to give testimony incriminating themselves. The amendment released witnesses from liability for acts which their testimony covered. Judge Grosseup holds that this is also unconstitutional in that it is an attempt to abridge a constitutional right by congressional action.

This decision was made in the attempt to secure testimony before the federal grand jury. The government cannot appeal the case, and of course the other fellows won't; so the only thing for the government to do is to make up a case somewhere else. Grosseup's decision virtually renders the act nugatory in some of its most vital provisions.

PUBLIC WAREHOUSEMEN AS GRAIN DEALERS.

For several years the public warehousemen at Chicago have been encroaching upon the business of the receivers, much to the displeasure of the commission merchants. The owners of the public elevators finding that they were not receiving enough grain to insure a profit on the capital invested decided to go into the market, buy grain, store it in their own houses and issue certificates against it.

To this many members of the trade would make no objection, but when it comes to shipping out the grain, the shipper who knows that the proprietor of the house from which his grain is taken is also a dealer in that kind of grain will look with suspicion upon the grain in spite of himself. If a shipper was to buy 5,000 bushels of unseen corn without regard to quality or grade he would expect to receive the poorest corn the seller had, and he would not be disappointed. Likewise those who buy grain stored in public elevators operated by men who deal in grain must expect to receive the poorest of that grade in store or they will be greatly disappointed.

Although the owners of public elevators are supposed to be custodians of grain owned by outsiders and to bear no other relation to any grain stored in their house, yet some of them own grain in their house, which means that they can and probably will hold as their own the best of the grade in which they are interested and will deliver the poorer grain to the holders of the regular certificates. This brings discredit upon the market and all grain shipped from the public houses, and no doubt leads many Eastern dealers to buy direct from country shippers.

If elevator owners at central markets desire to operate their houses as private houses for the storing of their own grain, all well and good, but if they want to act as custodians for other owners of grain let them operate their houses as

exclusively public houses. The trade does not want nor can it afford to support houses of the mongrel class, but it does want purely public houses.

It would be a very difficult matter to ignore this class of houses and patronize only those doing a public warehouse business exclusively, but it could be done in many cases and might be done often enough to discourage warehousemen in dealing in grain stored in their houses. The practice is iniquitous; it is against the interests of the trade at large and should be stamped out if possible.

THE BILL WILL BE HATCHED.

Farmer Hatch succeeded in getting his bill referred to his own committee, whence it will emerge in all the glory of a trade-destroying juggernaut. He promises that it will not interfere with "legitimate speculation," and the various Boards of Trade have so much confidence in his promise that at a meeting held in this city the last of February they determined to fight it tooth and nail. The House committee on agriculture is having hearings at the present writing. As the bill is simply to make capital with the political farmers, the hearings represent so much wasted time. The purpose is to pass the bill, regardless of its effect. It will doubtless pass the House, and very likely the Senate. But the President is in the way, and, he failing, the Supreme Court remains as a last resort.

OVERCHARGES AND BILL OF LADING RATES.

Grain shippers in all parts of the country are frequently charged more than they should be simply because they do not watch the local agent and keep posted as to what rate they are entitled to be given. Sometimes they learn of the mistake and put in a bill for overcharges. If the local agent is not overly officious and desires to keep on good terms with his patrons he will O. K. the bill and send it to headquarters. A dozen letters of inquiry and a wait of a year or two frequently brings the return of the amount of the overcharge.

Sometimes shippers go to law about the overcharge, but the amount is generally so small as to discourage most of the shippers. One, J. J. Armstrong of Kansas City, recently ignored the amount and fought for principle. He sued the C., St. P. & K. C. R. R. Co. for an overcharge of \$4 on a shipment of grain and got judgment for the amount. Nine other claims were paid by the carrier when they found they must pay this one.

Shippers can generally collect the amount of an overcharge made by misrouting, erroneous classification, a change of weight, or by mistakes made in computing rates, either at the time the bill of lading is issued, in billing the shipment out, or when the agent at destination makes his bill for the freight.

It frequently occurs that the agent at point of shipment makes a mistake in the rate and the shipper is induced to make a shipment, where, if the agent had quoted the correct rate, the shipper could not have afforded to make the shipment and would not have done so. A Washington firm recently instituted a replevin suit against the Pennsylvania Railroad Company to compel them to recognize the bill of lading rate. As soon as the plaintiff showed fight the railroad company paid the entire costs, nearly \$100, rather than to have the case come up in court. This was a peculiar case. Bills of lading were issued by a Western road at 24½-cent rate to Washington, the car to go via Kankakee for transfer and inspection. When the car arrived in Washington the rate was found to have been changed on the manifest to 28½ cents. The bill of lading freight was tendered the company, which being refused, the plaintiffs replevined the goods.

There were two cars in question; it seems that the cars remained at Kankakee over 72 hours, the time allowed for re-billing, when they could be sent out on the through rate. Remaining over 72 hours in Kankakee, without re-billing the goods, must, so the railroad company say, take the local rate from the initial point to Kankakee, and the regular rate from Kankakee to Washington. Fearing, no doubt, that this position would not hold in law, the railroad settled the case.

The railroad companies hold that any bill of lading rate at variance with their published tariffs is void and cannot be protected. The Interstate Commerce Commission has decided that where a shipper does not enter into contract for the purpose of securing a rate which he knows, or by the exercise of reasonable diligence might have known to be illegal, but is an innocent party to it, and makes his shipment in good faith on the strength of the rate therein named, the courts have jurisdiction, and seem inclined to hold that he is entitled to have the goods delivered on payment by him of the amount named in the bill of lading. The United States Supreme Court held recently that there is nothing in the interstate commerce law which vitiates bills of lading, or which, by reason of the allowance of an illegal rebate, will invalidate a contract of affreightment, or exempt a railroad company from liability on its bills of lading.

REBATES ARE GIVEN.

It will not be denied save by traffic managers that rebates are still given by carriers to shippers of large quantities of grain. In evidence of the fact that rebates are given we quote from the *Journal of Indianapolis, Ind.*, as follows:

One of the largest grain shippers in this section was asked yesterday by a reporter if the lower rates, in his opinion, would effect much increase in grain shipments. He answered "no. The fact is," said he, "we had rather let rates be nominally 25 cents per 100 pounds, Chicago to New York, than have them reduced to a 20-cent basis. A 3-cent rebate is much better to use than a 5-cent reduction." He then stated that when rates were down to a 20-cent basis every little shipper dipped in and the market soon became glutted, whereas, when the little shippers did nothing and the big shippers got a 3-cent rebate there was little danger of the market becoming overstocked. As this firm, in December, was paid \$1,100 rebates on the business it did over a certain line in November, it is evident that the shipper knew what he was stating to be true.

According to the statement of this large shipper the carriers get more business when they give a rate that induces the small dealers to ship, and as it is only 2 cents lower than the average rate to the big shipper the greater amount of business drawn out by the lower nominal rate surely makes the business more profitable to the carrier, hence the carriers should maintain the lower rate.

It cannot be denied that there is some show of justice in the claim that shippers of large quantities of grain are entitled to a lower rate on each large shipment than when shipping one or two carloads. The roads are permitted to make a lower rate for a large number than for one or two passengers and they should be permitted to make openly a lower rate on large quantities of any kind of freight than on smaller quantities of the same kind of freight.

However, if a lower rate is to be made to any it should be published with other rates and made to any who would ship the stipulated quantity. It is argued that the nominal rate should be maintained to all for any shipment less than 10 carloads, that one cent should be deducted from the rate to anyone shipping 10 to 25 carloads at the same time and two cents to anyone shipping 25 to 50 carloads. Secret cuts in freight rates have always been the bane of the grain trade and have caused the carriers no inconsiderable trouble. If a lower rate is to be given to anyone it should be given openly so that any who desired could take advantage of it.

EDITORIAL MENTION

THE commissioners of the Illinois & Michigan Canal have decided to open it for navigation April 10.

THE exhibition of grain cleaning machinery at St. Petersburg, Russia, is now in progress and it is said several machines of American manufacture will carry off all the prizes.

WHEAT has been tried both in this country and Europe for malting purposes, but without very flattering results. It is rumored, however, that the experiment has resulted successfully in Rochester.

IF you want the finest of the World's Fair portfolios, read the advertisement on another page. The one we offer overshadows all the rest, and is worthy a permanent form and a place in the library or parlor.

THE Weber Gas and Gasoline Engine Company, Kansas City, Mo., write that business is exceptionally good, they having a large number of orders now on hand and running full capacity. The outlook for future business they also report as very good.

THEY have had quite a bull campaign in wheat in San Francisco, and some of the shorts really got excited over it. They marked May wheat up to twenty cents a cental premium over the cash article. They have some brave bloods out there, fellows who have been buying wheat since last September.

A CHICAGO grand jury is going through the motions of investigating the bucket shops. It is surprising that, with a law as explicit as the Illinois statute on the subject, it seems impossible to wipe out these concerns. There seems to be a cog slipped somewhere between the law and the execution of it.

AS A result of the transfer switch law passed by the last Nebraska Legislature, the secretary of the state board of transportation has ordered the Union Pacific and the Burlington railroads to construct a joint switch at Schuyler, and the Elkhorn and Sioux City Short Line to build one at O'Neil. The railroads will test the validity of the act in the Supreme Court.

THE present tariff on hay is \$4.00 per ton. The Wilson Bill made it \$2.00 per ton. The Senate bill, as reported by the sub-committee, makes the duty 20 per cent. *ad valorem*, or about \$1.50 per ton. The *Hay Trade Journal* has circulated a petition and collected 30,000 signatures of dealers and farmers, asking that the duty on hay remain as at present. Hay is our most valuable crop, though our habitual thought regards it only as an incident of agriculture.

STATISTICIAN ROBINSON of the U. S. Agricultural Department, stated recently, at Chicago, that the country might rely confidently, that his forthcoming reports of farmers' stocks would be based upon the actual returns, regardless of any inconsistency it might bear to former statements of the department. No one thinks the statistician paid any attention to reports made in the past, or doubts the reports were based on actual returns, but either the last report is wrong or

the reports made last year. Without consistency the government crop reports are decidedly detrimental to the very interests they are intended to advance.

D. H. HOUSTON has built on his 3,000-acre seed grain farm at Hunter, N. D., an elevator of 30,000 bushels' capacity, for the storage of the seed grain only that he grows on his farm. Mr. Houston has been growing and selling seed wheat at Hunter, N. D., for the last 14 years. His advertisement of Blue Stem Wheat will be found in this issue.

A QUIET suspicion exists that farmers in the western part of Kansas have found a new industry. In the past four years \$60,000 have been paid for wolf scalps, and the amount is increasing each year. It has been suggested that raising wolves and then raising their scalps would pay better than some forms of agricultural industry at present and prospective prices.

IT is the settled conviction of a good many people that the best way to fight Hatch's bill is to let it become a law, if the president does not veto it, and then simply ignore it and carry it up to the Supreme Court for final determination. It is not believed that the Supreme Court would sanction such a violent interference with private right of contract as the Hatch bill proposes.

JUST before March 1 there is a great rush to load wheat into vessels in San Francisco. On the first Monday in that month a sworn statement must be made of all property subject to taxation. Wheat loaded into vessels escapes; and this year many hundred thousand bushels were loaded from the sheds and docks and put afloat to escape the watchful eye of the assessor.

CHARTER GAS ENGINE COMPANY, Sterling, Ill., write us that their sales for January and February of the present year exceed those of the same months in other years over 25 per cent., and orders for March have held up as well. Their late shipments extended from Maine to Arizona, for mills, elevators, pumps for irrigation and other purposes, factories, hoists, etc.

IN making comparisons in Chicago receipts and prices this year with last, it must be remembered that the Cudahy manipulation commenced in March, and receipts largely increased in consequence, and continued to increase and the price to advance until it reached 90 cents. What a normal market and receipts would have been last March we have no means of determining, because the market was manipulated until the storm broke.

WE call attention to the advertisement in our column of Miscellaneous Notices for a capitalist who is wanted to take an interest in a Chicago grain elevator business. The property referred to is one of the most prominent of its kind in the city and is doing a highly profitable business. It affords a rare opportunity for anyone desiring to engage in the grain business in Chicago and who possesses the necessary capital and requisite qualifications.

FOR the 'steenth time Farmer Hatch remarks: "There is no intention on the part of the committee of which I am the chairman to discriminate in any manner by taxation, stamps or otherwise against any legitimate speculation, and it has been my earnest desire to impress this fact upon all boards of trade and other business representatives who have been accorded hearings." It would be interesting to know just what he regards as "legitimate speculation." His bill, if a law, will certainly serve to prevent some of his constituents from selling against purchases of corn, for a sale for future delivery would have

to be consummated at the time specified, and could not be carried over wholly or in part.

ANOTHER case of consigning grain to any man who sends you a circular letter soliciting it has come to light. A grain dealer of Bozeman, Mont., was induced by glowing accounts of the active markets of Butte to consign three carloads of grain to a firm who claimed to be of "high standing and unquestionable integrity." The firm was composed of one man who had no standing in the community, in fact, was unknown and had not even a place of business.

THE Senate Committee on interstate commerce recently listened to arguments by Counselman of Chicago and a number of railroad officials in favor of the proposed amendment to the Interstate Commerce law to allow railroad pooling, reasonable rates to be fixed by the Interstate Commerce Commission. A few other grain shippers are interested in that same question, and would be pleased to be granted a hearing before the amendment is acted upon.

THE Northwestern Iowa Grain Dealers' Association, which has conducted successfully several suits in the interests of members against the Chicago & Northwestern Railway for the recovery of excessive and discriminating charges, has decided to bring suit against this road and the Chicago, Rock Island & Pacific to recover two to three cents per hundred on all grain shipped east over these roads from Iowa points since 1890. This is what the roads have charged in excess of that which the Interstate Commerce Commission decided was just and equitable.

IT seems probable that the great lakes will be open to navigation sooner this year than for many years past. On March 10 a strong northwest gale cleared the Straits of Mackinac of ice, so that with mild weather the straits will be open to navigation this month. Usually the ice in the straits delays the opening of navigation three to five weeks. The earliest the straits have been open during the past 40 years was April 4, 1859. In 1891 they were open April 20, and April 7 in 1892, while in 1888 they were not open until May 4. No vessels have left Chicago for the straits this season, but a few more days of spring weather may confidently be expected to start the 9,000,000 bushels afloat down the lakes.

SHIPPERS and receivers vigorously and effectively opposed the effort of the carriers to enforce the use of a non-negotiable bill of lading recently, and now a number of grain dealers in all parts of the country have been fleeced by one Richland of Kansas City, who sent drafts and forged bills of lading to a number of dealers in different markets. The railroads were not parties to the fraud, and the negotiable bill of lading is still in use. The wonder is that commission men are not bled in this manner oftener, because so many of them accept drafts against shipments from unknown parties. This encourages irregular buyers and cuts in upon the business of the regular shippers with established credit.

M. DEPUY, the president of Erie Canal Boatmen's Association, has sent us word that the boatmen are ready to take a hand in any rate cutting fight the rail carriers may institute, and that the 2,000 canal boats now in New York will be in Buffalo in time to get grain to New York for May delivery. The boatmen have carried grain for two cents a bushel from Buffalo to New York, and are prepared to do so again if occasion requires it. Lake vesselmen are now offering to take grain from Chicago to Buffalo for 2@2½ cents a bushel, which would make the rate to New York about 5 cents. The rail carriers cannot compete with such low rates,

so are attempting to induce large shipments now by making the nominal rate 20 cents and cutting the rate to 15 cents.

We wonder what Senator Pettigrew's remedy would be for the state of affairs precipitated by the last government crop report. His resolution in the Senate deplored the confidence which the public manifests in the reports of *Bradstreet's* and the *Price Current*, and the lack of confidence felt in the government reports. And now comes a government document which is a tacit admission that the government has been wrong all along, and has made the trade bearish on wheat. As Senator Pettigrew deplored the lack of confidence felt in government reports because they were detrimental to the farmer, what would he have the public do in the present instance? Would he have the public disbelieve the government's bear report on wheat and believe its bull report on corn?

A MEMBER of the St. Louis Merchants' Exchange, who went to Washington to represent that body in opposing the Hatch bill, came back possessed with the idea that the bill as finally reported to the House would be amended into harmless shape. This is quite possible, as the sole reason for the bill's existence is to make capital for a few cheap demagogues. But the chances are that Mr. Hatch simply made the professions he has always made. Of course he is not opposed to legitimate business; but his ideas of legitimate business are measured by the methods of fifty years ago. The Hatch bill should not be amended but killed. If it cannot be killed, then the whole question had better get before the Supreme Court at once. People might as well be informed at once how far restrictive legislation can go.

It has long been suspected that a leak existed somewhere in the Agricultural Department through which information filtered respecting forthcoming reports. Whether the suspicion be well founded or not, similar information certainly gets into the hands of some members of the trade. A Chicago house is now supposed to be the source of this information, and the information is vouchsafed at Washington that several persons formerly employed in the statistical division of the Agricultural Department are now employed by a Chicago firm. It is surmised that they collect their information from the same sources as the department, and hence are able to approximate the report about to be made by the department. At all events, previous to the issue of the last report, the Chicago firm telegraphed to its correspondent in St. Louis that the report would estimate the farmers' reserves of wheat at 115,000,000 bushels, and would be bullish on corn, both of which predictions were verified.

ORGANIZATION OF KANSAS GRAIN DEALERS.

A Kansas correspondent gives some good reasons, in a communication published in this number, why the grain dealers of that state should organize an active association. He also suggests a place to meet and outlines work for the association. We would be pleased to publish the opinions of others on the same subject.

The Board of Trade of Wichita has inaugurated a move that may result in an organization of grain dealers for the general advancement of the interests of members, but its prime object is to obtain lower rates on grain to either New Orleans, Galveston or Mobile. A gulf outlet is wanted for export grain, and the commercial exchanges of the ports named will be solicited to send delegates to the meeting and exercise their influence in behalf of lower rates on grain for export.

The move is a commendable one and no doubt would prove of considerable advantage to the

shippers of the Southwest during the winter months, but when the great lakes are open to navigation low freight rates on the northern border and high temperature on the southern border stand opposed to export shipments of grain via the gulf ports.

However, an association of grain dealers in the Southwest can find equally important work to do in other lines, and with united, harmonious action, would secure as great, if not greater, benefits.

Trade Notes.

The Weeks Gas Engine Company was incorporated March 12 at Lake Geneva, Wis., with a capital stock of \$5,000.

Carbon bisulphide, which has for some time been successfully used in the ridding of mills and elevators of weevil, is now by a solution of Mr. E. R. Taylor's (of Cleveland, Ohio), called "Fuma," applied to the extermination of squirrels, rats, etc. Mr. Taylor prints a number of letters from farmers and others attesting the success of his carbon bisulphide in the extermination of vermin and other pests.

The Racine Hardware Company having purchased at assignee's sale the plant and personal property lately operated by the Racine Hardware Manufacturing Company at Racine, Wis., on Monday, March 1, 1894, the different departments of the factory buildings lately purchased by it were put in operation, and the company is now ready to fill orders with promptness and dispatch. The company manufactures what it claims to be the best steam engines known to the trade. The Racine Automatic Engine has won its way into the confidence of the general public, and needs no recommendation from us.

Bags and bagging valued at \$746,941 were imported during the seven months ending with January, against an amount valued at \$930,372 imported during the seven months ending with January, 1893. Burlaps (except for bagging for cotton) valued at \$2,627,843 were imported during the seven months ending with January, against an amount valued at \$3,282,968 imported during the seven months ending with January, 1893. Of imported bags and bagging an amount valued at \$11,572 was exported during the seven months ending with January, against an amount valued at \$50,069 exported during the corresponding months preceding. Of imported burlaps (except for bagging for cotton) we exported an amount valued at \$825 during the seven months ending with January, against an amount valued at \$62,514 exported during the corresponding months of the year preceding.

THE Philadelphia Engineering Works, Limited, have received an order for one of their Corliss Winding Engines from the Chamberlain Coal Company of Pottsville, Pa., Francis A. Pocock, engineer. This winding engine has 34" steam cylinders, 60" stroke, to be operated by steam at 125 pounds' pressure per square inch, generated by a battery of Stirling Boilers. The engines are provided with the Stevenson Link, reversed by steam gear, with an oil cataraet. The engine is to be of the standard Philadelphia Corliss Liberating Valve Gear, controlled by a sensitive governor of the Porter type. The hoisting drums are 10 in diameter, 10' long, with powerful hand and steam brakes. The adjustment of the lift is effected by a toothed gear clutch, thrown in and out with worm gearing. The main shaft bearings are 17" in diameter by 30" long, the body of the shaft between the bearings being 19" in diameter, the central bearing being 19x30". The engine is to lift an unbalanced load of 50,000 pounds at the rate of 1,000 feet per minute. The engine and drums will weigh about 325,000 pounds.

Barley malt aggregating 322 bushels, valued at \$378, was imported in January, against 130 bushels, valued at \$184, imported in January, 1893; and during the seven months ending with January 1,548 bushels, valued at \$1,885, were imported, against 2,426 bushels, valued at \$3,016, imported during the seven months ending with January, 1893.

GRAIN INSPECTED AT ALBANY, N. Y.

The quantity of grain passing through this market has been greater this year than up to this time a year ago, says the *Journal of Albany*.

The inspector of grain made his annual report to the Board of Trade yesterday. It shows that a greater quantity of grain was inspected during the year ending Feb. 15, 1894, than during 1893. The report follows:

	1894.	1893.
State wheat.....	1	.....
Western wheat.....	2	.....
Western rye.....	.....	26
State rye.....	2	22
Western oats.....	1,839	1,391
State oats.....	3	6
Western corn.....	1,798	985
Buckwheat.....	3	5
State barley.....	231	536
Canada barley.....	221	380
Western barley.....	101	99
Totals.....	4,201	3,450

Of the above 33 cars of state barley, 94 cars of Canada barley, and 13 of Western barley were of the crop of 1892. Also the following boat loads:

	1894.	1893.
Canada barley.....	1	2
State barley.....	.....	4
Western barley.....	2	1
Western corn.....	2	12
Totals.....	5	19

ELECTRICITY AS A CANAL MULE MOTOR.

We have already recorded our views in regard to the inutility of the employment of electricity as a motive power on the canal, but it has demonstrated its capacity for moving some things. A few days ago a lineman was looking for some trouble along the tow path west of Troy, N. Y., when he came upon several drivers trying to start a mule that had made up its mind to stand still. The drivers had twisted that mule's tail, poured sand in his ears, lit a fire under him, cussed him for himself, his mother and his brother when the lineman remarked, "I can start that mule without hurting him." The lineman climbed the nearest pole and attached a piece of wire to a main wire, then came down, wrapped his handkerchief around his hand and touched the mule on the back with the wire. The mule was standing in mud, but the last seen of him he was still headed west with head and tail up.

DOTS AND DASHES.

During the months of January and February 4,887 tons of grain were exported from the Mammoth wharf in Los Angeles, Cal.

The total amount of grain received in Chicago during the year ending Oct. 31, 1893, was, according to the report of the chief grain inspector, 91,676,987 bushels; shipped, 91,547,190.

Damaged wheat can now be shipped from Spokane and Poulouse points to Chicago for 50 cents per hundred, that being 10 cents off the regular rates. This cut in rates is made as a relief to the farmers.

John Anderson of New Carlisle, Ind., recently began feeding dry wheat to 14 rather mangy pigs averaging 156 pounds each. For two weeks they seemed at a standstill and then began to gain. At the end of six weeks they averaged 220 pounds.

The State Grain Inspection Department's report for the year ending Oct. 31, 1893, shows that the expenses of the department exceeded the receipts by \$20,974. There is a prospect of an increase in the inspection fee of 10 cents per car, making it 35 cents.

A preliminary meeting of dealers in feed was held on Monday at the Baltimore Corn and Flour Exchange, at which a committee of six was appointed to take into consideration the advisability of forming a permanent organization for the protection of mutual interests, the committee to report at a later meeting.

ELEVATOR AND GRAIN NEWS

A brewery is wanted in Phoenix, Cal.

Athens, Mich., will have a new elevator.

An elevator is needed and wanted in Lawrenceburg, Ind.

A farmers' elevator is contemplated at Fountain, Minn.

A new elevator will be erected at Green Bay, Wis., in the spring.

P. Freyman is now engaged in the grain business at Dyersville, Iowa.

Work on the new elevator at Graymont, Ill., has been commenced.

There is some prospects of a new grain firm locating in Tuscola, Ill.

W. T. Farlow, grain dealer at Allenville, Ill., is doing a brisk business.

McCormick & Eustice, Cuba City, Wis., report a good business in grain.

L. H. Perry is said to be doing a good business at his elevator at Kankakee, Ill.

Houston & Houston, grain dealers at Gonzales, Tex., have dissolved partnership.

Mr. Strang has obtained the proprietorship of a grain elevator at Gurnee, Ill.

John McGrann intends to erect a large granary at Henderson, Minn., this spring.

A stock company has been organized to erect a cotton seed oil mill at Camden, Ark.

J. O. Lafreniere & Co., dealers in grain at Montreal, Que., have dissolved partnership.

Palmer & Wandell have succeeded A. Wandell, dealer in grain at Muscotah, Kan.

The Wilcox & Fuller Grain Company at Bancroft, Kan., have dissolved partnership.

A grain dealer of Fenton, Mich., has shipped 100 carloads of hay during the season.

The grain commission firm of F. J. Simmons & Co., Detroit, Mich., has been dissolved.

The Model Milling Company at Salisbury, Mo., have recently completed a new elevator.

A large grain elevator is to be erected at St. Joseph, Ill., by L. W. Porterfield of Sydney.

J. T. S. Brown & Son will build a large distillery and grain elevator at Louisville, Ky.

The Belle of Baltimore Distilling Company has been incorporated at Baltimore, Md.

Charles D. Bowers, grain dealer of Rosewood, Ohio, has taken James Pickering as partner.

Vannerson & Co., a grain commission firm of Augusta, Ga., have dissolved partnership.

Mrs. M. E. Culver intends to build an elevator on the Big Four road near Lafayette, Ind.

F. F. Lutz, proprietor of the Falls City Malt House, Louisville, Ky., has made an assignment.

The Midland Elevator Company at Kansas City, Mo., has sold its elevator at Holstein, Neb.

J. H. Ebeling has succeeded Straubel & Ebeling, millers and grain dealers at Green Bay, Wis.

E. E. Thomas, a grain buyer of Chatsworth, Iowa, was assaulted and robbed of \$315 last month.

The proprietors of the flour mill at Kalispel, Mont., are contemplating the erection of a large elevator.

The Tillapaug elevator at Rothsay, Minn., has been closed down and will remain so until next season.

The South Chicago Elevator Company of Chicago certified to an increase of capital stock to \$510,000.

E. L. Bleistein, grain dealer in Myerstown, Pa., is shipping considerable wheat to Eastern grain dealers.

White & Stewart, flour, feed and livery, Fort Saskatchewan, Alberta, N. T., have given up business.

Vogt & Sweeney-Brewing Company has been incorporated at Chicago, with a capital stock of \$150,000.

The Spokane Distillery at Spokane, Wash., has been sold for \$26,000, and a new company will run it.

Yankton, S. D., is contemplating the erection of a distillery with a capacity of 3,000 bushels of corn per day.

Shareholders of the Farmers' Elevator at Elbow Lake, Minn., decided not to sell the wheat on hand and declare a dividend as in former years, but instead

each shareholder will be entitled to his pro rata share of wheat to be used as seed wheat.

Mr. George Seaver has sold his interest in the firm of John G. Morgan & Co., grain merchants at Denver, Colo.

A company has been incorporated by the farmers of Rushford, Minn., for the erection of a farmers' elevator.

Rumley & Wykle, grain dealers of Danforth, Ill., intend to build an addition to their new elevator this spring.

The firm of Wren & Margurate of Dunquat, Ohio, has been dissolved, Mr. John Wren continuing the business.

The Mills Elevator Company at Greenville, Ill., certified to a dissolution of organization and surrendered its charter.

The proprietors of the Sioux Falls Brewery at Sioux Falls, S. D., intend to double the size of their plant this spring.

Adams & Gilbert, grain dealers at Weeping Water, Neb., have sold their branch office and business at Eagle, Neb.

The Montreal Warehouse Company held its annual meeting recently, when directors for the ensuing year were elected.

The receipts of grain at Toledo, Ohio, show a greatly diminished aggregate because of the difficulty in elevating.

Rowe & Nims, a wholesale commission firm in hay and grain at Minneapolis, Minn., has been succeeded by Fred Rowe.

Mr. Nutt, the warehouseman of St. Johns, Ohio, is buying grain and holding it until the completion of his new elevator.

Mr. F. Post, general manager of the E. M. Dickey Elevator in East Dubuque, Iowa, reports a good business at that place.

The Danville Distillery in Macon county, Ill., after an idleness of 20 years has been started up with a daily capacity of 100 barrels.

McCommon & Williams grain dealers at Quitman, Mo., have dissolved partnership, Howard McCommon continuing the business.

C. H. Durand has succeeded to the grain and produce commission business of the Durand Commission Company at Chicago, Ill.

There is a car famine at Hudson, Ill., the grain merchants being unable to secure a sufficient number of cars to ship their grain.

W. J. Connors & Co. of Chicago have established a branch office in the new Board of Trade recently opened in Bloomington, Ill.

The firm of Eikenberry & Co., dealers in grain and lumber at Chariton, Derby and Russell, Ia., has been succeeded by Stewart & Co.

Viall & Co. of Chicago have opened a grain commission house at Kansas City, Mo., with James D. Griffith of Chicago in charge.

On account of the machinery of the large elevators of Fort William, Man., going wrong last month, no grain was taken in for a week.

E. S. Woodward & Co., a grain commission company of Minneapolis, Minn., have filed articles of incorporation with a capital stock of \$50,000.

Thieves broke into safes belonging to Aaron Waller and Young & Waller, grain dealers at Morganfield, Ky., February 22, and realized a few dollars.

Wright & Chilton intend to build a large broom corn storehouse on the ground lately occupied by the Wing Mill Company, to be finished by May 1.

Mr. F. M. Quale of Toledo, Ohio, commenced work March 10 on the erection of his new elevator on Water street. The new building will cost about \$22,000.

The steamer R. C. Reid at Saugatuck, Mich., has received a link belt elevator for taking grain from the hold which has a capacity of 650 bushels per hour.

The Farmers' Co-operative Association of Garner, Iowa, will put up an elevator instead of a warehouse at that place, large enough to hold 15,000 bushels of grain.

The Bates County Elevator Company of Bates, Mo., has been incorporated with a capital stock of \$10,000. Incorporators: G. B. Hickman, R. J. Hurley and J. T. Imbs.

E. A. Brown of Luverne, Minn., and W. F. Banta of Ridge Farm, Ill., are recent purchasers of automatic grain scales of the Chicago Automatic Scale Company.

The West Superior Elevator and Storage Company at West Superior, Wis., was incorporated February 26. Incorporators, J. S. Hillyer, Arthur Miller, O. H. Whitaker, L. H. Page and Louis Hanitsch. Capital stock \$50,000. The company will operate a line of

country elevators, with Superior as a terminal point. They expect to eventually erect a receiving elevator and cleaning warehouse.

The schooners Annie E. and Horace Templeton took cargoes aggregating 245 tons from Balfour, Guthrie & Co.'s warehouse at Benicia, Cal., in the last week of February.

A gang of grain thieves which has been operating in Kansas City, Kan., for some time has been arrested. The grain was stolen from cars while standing on the side tracks.

The Fisher Mill and Elevator Company at Grand Forks, N. D., is to be incorporated as the Farmers' Milling Company, and the elevator business will be discontinued.

G. C. Dodd & Co., Cheboygan, Mich., will erect a grain elevator this summer. They are waiting until the survey of the Alpena Railroad, when they will choose a site.

McLaughlin & Hornbeck Bros. Co., doing a general merchandise, grain and hay business at Lakewood and Cowden, Ill., assigned recently. Liabilities \$15,000; assets \$11,000.

The Lake Superior Grain Company of West Superior, Wis., have arranged to do a general commission business. The members of the company are J. S. Hadley, R. Smith and T. G. Alvord.

The Interstate Grain Company has begun suit against Chas. Jungroth and others to collect \$2,750 on three notes, and in lieu of payment a lien is asked on 2,520 bushels of wheat given as security.

Conrad Jacob, a member of the firms of Jacob & Son and Jacob & Stephan, grain and feed merchants of Detroit, Mich., was assaulted and robbed February 14. His injuries were serious but not fatal.

A canvas is being made at Moline, Ala., to ascertain who will take hold of the project of the proposed grain elevator. The project is in the hands of a special committee of the Commercial Club.

A man who had been placed in jail at St. Peter, Minn., about the middle of February, for larceny, made a confession giving an account of the operation of his gang in plundering wheat bins at night.

The railway companies of West Superior continue to suffer losses from the depredations of wheat thieves. Five sacks of wheat were found in a sewer along with several stolen shovels, and two boys were arrested.

The Metropolitan Mining, Stock & Grain Company of St. Paul, Minn., has been incorporated with a capital stock of \$50,000. The incorporators are Howard Hill, E. D. Hill, G. M. Fargo and T. P. Wilson.

The two firms owning elevators at Farmington, Minn., have been running the price of oats very high recently. As a consequence farmers from surrounding towns have been hauling their oats and other grain to Farmington.

Geo. A. Miller, a grain dealer at Burkett, Ind., a small station on the Nickel Plate road north of Wabash, left town two months ago to avoid arrest for selling 6,000 bushels of wheat belonging to farmers. He is now under arrest.

The Big Thompson Milling and Elevator Company of Larimer County, Colorado, has been incorporated. Directors, Wm. C. Davis, Herman G. Shellenberger, Jas. W. Stuchell, John M. Cunningham and J. Watson Reed. Capital stock, \$40,000.

The farmers of Mt. Vernon, Minn., intend to erect a farmers' elevator at Minneiska at a cost of about \$3,000. Meetings have been held at that place recently and a committee has been appointed to look over elevators in neighboring towns.

The Chicago Merchandise Investment Company has been incorporated at Chicago, with a capital stock of \$10,000, to operate all kinds of stores, mineral waters, hotels, collection business and general commission business in grain, etc. Incorporators, Frank S. McElherne, Frank L. Stobbs and G. F. Martin.

Empey & Woodard and Geraghty & Feely, two firms who own elevators at Farmington, Minn., have been bucking each other on oats, running the price up to 25, 25½ and 26 cents per bushel. As a consequence the farmers of that vicinity and from surrounding towns have been unloading, making business quite lively.

Thousands of bushels of oats and corn were scattered over the tracks of the Illinois Central's Rockford branch near the South Cicero, Ill., waterworks recently. A freight train from the West ran into a broken switch at the waterworks and a dozen cars were wrecked. Three men were arrested for stealing the grain.

J. C. Richland of the Richland Grain Company at Kansas City, Mo., is said to have proved himself quite a successful wheat speculator and a forger of bills of lading and drafts. He appeared in Kansas City some time ago and succeeded in mulcting \$30,000 from various firms. Those interested in Mr. Richland's whereabouts are Geo. A. Seaverns, the Weare Commission Company, W. R. Mumford of Chicago, Kan-

sas City grain operators, four commission houses in St. Louis and some in St. Joseph, Mo., two in Memphis, Tenn., one or two in Wichita, Kan., and others. There is a reward of \$950 for his apprehension.

Chas. T. Peavey & Co. on March 1 moved their office and business at Kansas City, Mo., to Chicago, Ill. They will confine themselves strictly to the business of grain commission, and have arranged to work in connection with Snyder, Fyffe & Co.

At Omaha, Neb., a verdict was recently rendered in the case of the Howell Grain and Lumber Company of Sioux City, Iowa, against the Missouri Pacific Railroad Company in favor of the plaintiff for the full amount of the claim, \$651. The case will be appealed.

Among the first things the Big Four road will do with the coming of better times with railroads will be the building of grain elevators at Sandusky and Cleveland, Ohio. Their elevator at Benton Harbor is proving a valuable improvement for the Michigan division of the Big Four.

Christian Smith, formerly in the employ of the Van Dusen-Harrington Company of Minneapolis, has been held to the grand jury on a charge of embezzling \$650 from his employers. Christian, notwithstanding the good name he has borne all his life, has already served a term in prison for a like performance.

A charter has been granted to the Kansas Grain Company with headquarters at Hutchinson, Kan. The company will buy, sell and store grain and deal in mill products. Capital stock, \$6,000. Directors, T. J. Templar of Kansas City, L. B. Young, L. A. Bigger, W. E. Hutchinson and J. F. Greenlee of Hutchinson.

C. Smith shipped a carload of flaxseed for the Van Dusen & Harrington Elevator Company, St. Paul, Minn., to Chicago recently, but instead of selling it and turning over the cash to his company, he had the car sidetracked and sold the flaxseed to Rogers & Co. of Chicago for \$700. The firm discovered his crookedness and Smith was arrested at Delano, Minn.

Messrs. J. J. Coon and M. Churchhill will at once begin the erection of a grain elevator with a capacity of 200,000 bushels on Swan Creek, Ohio, near the crossing of the Clover Leaf Railroad. It will be built of wood, sheathed with iron, and will cost \$25,000. It is expected that the new elevator will do a full share of business when the wheat crop of 1894 moves. Both gentlemen deal extensively in the cereals.

WAREHOUSE AT ANTIOCH, CAL.

The Antioch Warehouse Company was incorporated May, 1890. At first the large wheat warehouse alone was erected. This building is 200 feet long by 150 feet wide, and is erected on piles, so that the wharf in front is on the border of the deepest water, allowing of even barkentines and ships to lie at the wharf to load. The profits of the first year's enterprise were such that out of them the company was enabled, without putting up any more capital, to build also a warehouse for the storing of hay. This building, like the other, is on piles, and is also accessible to steamers and vessels generally. Both of these buildings being erected on the face of a bluff overlooking the river, there is thus allowed the opportunity of admitting wheat and hay by gangways near the roof and by means of inclined planes or shoots lowering to any desirable altitude above the floor beneath, thus saving fifty per cent. of the usual cost for handling. The worth of the two warehouses, and all property belonging thereto is fully \$30,000.

The company has had a prosperous time, even for a bad year, for it declared an annual dividend the other day of \$6 per share.

Its present officers are A. M. Simpson, president; M. W. Belshaw, vice-president, San Francisco; H. F. Beede, secretary and manager, Antioch. In addition to these three, two others, L. Meyer and E. J. Holt, make up the board of directors.

The warehouses have proved of the greatest convenience to the surrounding country, since they are large enough for the storage of a very great supply and accessible to vessels fitted to traverse the ocean. The grain warehouse is capable of holding 12,000 tons of wheat. —*Antioch Ledger.*

More money is lost to dealers by shipping wet and dirty grain than by any mismanagement of grading when sent to market, says a correspondent of an exchange. When the buyer grades wheat that is damp or musty, or full of cockle or other dirt, he is obliged to grade down and deduct several pounds to the bushel in order to come out even, for grain that is shipped damp gets worse and worse until it reaches its final destination, where, after being cleaned and cooled off, it is often refused at the elevators, and has to be sold at a great sacrifice, usually at a price but very little higher than hog feed. A buyer once bitten on damp grain is apt to grade down too low and cut on the weight after once being caught that way. If wheat be perfectly dry when put into a bin, it will keep a long time without heating, but will keep much longer in a bin where a current of air is admitted than where it is too close.

WATERWAYS

The following vessels have been loaded with wheat at Detroit: Steamer A. Folsom, schooners S. V. R. Watson, J. S. Richards, Lem Ellsworth and Delaware. This increases the amount afloat at Detroit to about 575,000 bushels.

The fact that markets of the Northwest are comparatively much higher than those of the East makes it practically impossible for vessel men at the head of Lake Superior to secure grain charters, shippers being unable to make sales on which there is a margin of profit. The nominal rate for Lake Erie tonnage is still steady at 2½ cents.

The steamship Bendo, loaded this week by I. M. Parr & Son with corn for Hamburg, carried 173,332 bushels, making it the largest cargo of grain exported from Baltimore. The Bendo loaded at Northern Central Elevator No. 3, lower Canton, in the quick time of eleven working hours, nearly 100,000 bushels being shipped in the first two and one-half hours.

Major G. A. Marr, in charge of the government work at the Portage Lake canals, reports a decrease in the number of vessels passing the canals as compared with 1892, but an increase in the tons of cargo carried. In 1893 1,408 vessels of a net tonnage of 664,510 tons carried 532,628 tons of cargo, as against 496,288 tons of cargo carried by 1,470 vessels of a net tonnage of 665,063 tons in 1892.

Charters for grain at Chicago include the steamer Robert Holland and consorts Fanny Neil and Stephenson for corn to Ogdensburg at 4 cents free of canal tolls; schooner Mary Woolson, corn to Buffalo at 3 cents; schooner C. P. Minch, corn to Port Huron at 2½ cents; schooner George H. Wormington, corn to Kingston at 4 cents, free of canal tolls; steamer D. C. Whitney and barge Wayne, corn to Ogdensburg at 4 cents, free of canal tolls.

Three times during the present wheat shipping season has the record for big ocean vessels ever sailing the waters of Puget Sound been broken. The latest and largest sailing vessel to arrive was the British bark Royal Forth. She is 329.3 feet in length, 45.3 feet in breadth, has 25.6 feet depth and a registered tonnage of 2,988. The ship Drumrock, which cleared February 6 with 104,704 centals of wheat, had a registered tonnage of 2,918, and was the largest sailing vessel previously entering Puget Sound.

During a recent storm on Lake Michigan, in which the steamer Roanoke suffered much hardship, ferry boat No. 2, which runs in connection with the Ann Arbor route, demonstrated the feasibility of maintaining traffic, even in the most severe weather, by crossing the lake from Keweenaw to Frankfort with a full train of twenty loaded cars. At Frankfort she took aboard another train and returned across the lake in the face of the wildest gale of the winter on Lake Michigan. This establishes the reliability of properly constructed lake car ferry lines.

A final survey of the ship canal across the Florida peninsula will shortly be made. The canal will be about 300 feet wide, 37 feet deep and about 150 miles in length. The proposed route is to commence at the gulf end, about 15 miles below Cedar Keys, run northwest to Orange Lake, then across the lake and down the Orange River into the St. John's River, about 20 miles above Palatka. From this point the canal will go direct to St. Augustine Bay, about 100 miles. This route will shorten the distance from New Orleans to Liverpool by 1,000 miles, and vessels will save the dangerous voyage around the Florida Keys and the Bahamas.

A project for a canal which, if successful, will entirely revolutionize the traffic of the great lakes, is said to be in contemplation by a number of capitalists of Chicago, New York, Boston and London. The proposed canal is designed to facilitate the passage of vessels from Chicago and Milwaukee to the East, and to render unnecessary the present long route through the Straits of Mackinaw, Lake Huron, St. Clair River and Lake, and thence down the Detroit River to Lake Erie. The plan just at present under serious consideration is to construct a canal directly across the state of Michigan from the eastern shore of Lake Michigan to Toledo, Ohio.

The Lake St. Clair and Erie Ship Canal Company has been organized in West Superior, Wis. A preliminary organization was arranged in Duluth several weeks ago, but the company was incorporated in Wisconsin as it expects to make Milwaukee its headquarters. The capital stock was placed at \$250,000. The plan of the company is to build a canal from Lake St. Clair to Lake Erie, thus avoiding the Lime Kiln Crossings and other dangerous places, and shortening the route to Buffalo by 100 miles. The stockholders include some of the prominent men at the head of the lake, and capitalists of the Twin Cities, Chicago and Eastern people. D. F. Henry of Detroit

is chief engineer of the company, and W. C. Porter of Minneapolis is the treasurer.

In three days last month 28 boats were chartered for grain in Chicago River, the total capacity exceeding 1,500,000 bushels of corn. Under the active demand for boats rates advanced 2½ cents for storage and freight to Buffalo at the opening of navigation. In all 105 boats have been loaded in the Chicago River during the winter, and above 6,000,000 bushels of grain are on board lake vessels ready for transportation to Buffalo and other lake ports at the opening of navigation next April. "If the present spurt in corn shipment continues," said George Boyden, a leading shipper, "every boat in the river will be loaded at the opening of navigation. About two-thirds of the winter fleet is now placed."

A resolution has been introduced in the House of Representatives at Washington, providing that a committee be appointed to investigate and report on the conditions, financial and otherwise, of the Nicaragua Maritime Canal Company, as to what sums of money have been received by the company, how they have been expended, what progress has been made in constructing the canal, the company's ability to construct it, and whether the repeal of the charter will promote the public good. Another plan regarding the Nicaragua Canal now before Congress is that providing that the government should guarantee the bonds of the company, and another providing for a committee of investigation to visit Nicaragua.

OBITUARY

H. S. Wolf, wheat buyer of Henning, Minn., died recently.

G. G. Herman, warehouseman, member of the New York Produce Exchange, is dead.

M. T. Tobin of the firm of Harrington & Tobin, wholesale hay dealers at N. Platte, Neb., is dead.

Mr. Van Blaricom, grain jobber and member of the New York Produce Exchange, died recently at the age of 58.

Mr. George S. Roberts, bookkeeper for C. C. Buckman & Co., and an ex-grain merchant well known on 'Change, died suddenly at Baltimore, Md., February 23.

L. J. Fletcher, a pioneer grain dealer of the Missouri Valley, died at Lake City, Minn., February 13, aged 60 years. He had charge of the business of H. J. O'Neil of Winona, at Duluth and elsewhere.

Thomas H. Levering, formerly of Baltimore, Md., where he was a member of the firm of Levering & McAttee, and of the Corn and Flour Exchange, died at Toledo, Ohio, March 4. He was 56 years of age.

James P. Campbell, the prominent grain commission dealer of Kansas City, Mo., died February 16, aged 48 years. Mr. Campbell was born in Cincinnati, Ohio, in 1846. About 1875 he went to New York and engaged in the brokerage business, and in 1880 he engaged in the grain business in Kansas City. In 1892 he became a member of the grain commission firm of Christopher, Campbell & Smith, but retired from active business after a few months on account of his health. Mr. Campbell was very popular with the grain commission men, and the Commercial Exchange of Kansas City passed resolutions of respect and condolence.

Andrew B. French of the grain commission firm of French Bros., died March 6, after a protracted illness. Mr. French was a prominent figure in the Western grain trade, and a member of the Kansas City Commercial Exchange. Andrew French was born in Cooper County, Missouri, and entered the newspaper business in Kansas City. He afterward established a wholesale grocery house at Denison, Texas, and seeing the golden opportunities that were opening in the grain trade, he abandoned the grocery business and established the well-known firm of French Bros. Grain Commission Company, which proved to be one of the leading concerns of its kind west of the Mississippi. The Kansas City Commercial Exchange passed resolutions of sorrow at his death and commiseration with his widow and children.

Grain buyer Leddy at DePere, Wis., recently bought several loads of wheat three years old for which the owner was offered 92 cents just after it had been threshed. Believing wheat would soon be worth a dollar he kept it, and although the price continued to drop he refused to sell it. The wheat was finally sold for 53 cents.

Mr. George Eichorn of Miles City, Mont., has purchased a carload of barley for seed to be planted in Iowa. Mr. Eichorn was struck with the inferiority of the barley raised near Le Mar, Iowa, in comparison with that raised near Bozeman, Mont., and after experimenting he says that the Montana seed will create a veritable boom in barley raising in Iowa.

ITEMS FROM ABROAD

The government of India has reiterated its statement that it does not intend to impose an export duty on oil seeds and wheat.

During the twelve months ending Dec. 30, 1893, the United Kingdom imported from the United States 32,262,851 hundredweight of wheat; in the same time in 1892 33,886,742 hundredweight, and in 1891 24,194,955 hundredweight.

The measures recently taken by the Russian government for assisting farmers by advancing money on their grain stored in barns or granaries ought to create a demand for portable metal cribs or granaries such as have been lately invented.

During the twelve months ending Dec. 30, 1893, 65,417,308 hundredweight of wheat was imported into the United Kingdom from the United States, and during the year ending Dec. 30, 1892, there was 64,901,799 hundredweight, and in 1891 66,312,962 hundredweight imported.

The importation of hay into the United Kingdom in January, 1894, was 31,967 tons, as compared with 37,314 tons for the month of December of the preceding year. The total importation of hay into the United Kingdom for the year ending Dec. 30, 1893, was 263,050 tons.

From Sept. 1, 1893, to Jan. 31, 1894, the United Kingdom imported from the United States 15,033,389 hundredweight of barley, 5,702,560 hundredweight of oats, 12,009,956 hundredweight of Indian corn, against 8,667,163 hundredweight of barley, 5,965,219 hundredweight of oats, and 12,682,487 hundredweight of Indian corn from Sept. 1, 1892, to Jan. 31, 1893.

The United Kingdom's imports of linseed during January were rather good as compared with the preceding year, 130,615 quarters (a quarter being equivalent to 8 bushels) being received. In January, 1893, there were 110,098 quarters imported, and in January, 1892, 185,754 quarters. The total importation in 1893 was 1,699,425, and in 1892 there were 1,902,152 imported.

Italy has announced that among the new taxes to be levied by that country would be an increase of 2 lire per quintal (equivalent to 10.8 cents per bushel) on imported wheat. For the year ending July 31, 1893, Italy imported 38,600,000 bushels of wheat, against 15,392,000 bushels for the year ending July 31, 1892, and 23,120,000 bushels for the year ending July 31, 1891.

During the recent debate on the proposal to increase the duty on wheat in the Chamber of Deputies at Paris, the reporter of the proposal said that the measure was necessary to prevent the decline of the corn growth. The president of the standing committee on customs said that the consumers would not be affected by the measure. The price of corn had been affected by the monetary question and the fall in silver had lowered the price of the produce. The remedy would be bimetallism.

A Liverpool correspondent of the *Corn Trade News* complains of the injustice of the very inadequate allowances being made by arbitrators on importations of new Odessa maize. This encourages the shippers to go on sending corn that is both unsound and not in proper condition to stand the voyage. When it arrives it is salable only at a sacrifice. When corn is bought on rye terms the correspondent maintains the allowance ought to be equivalent to the difference between the selling values of the perfect corn and the inferior article.

The adulterator is always with us nowadays, and the reader has to be warned of the devices of certain persons who seem to profit by the fact of rice oil being much cheaper than linseed oil. The feeding value of rice oil is relatively very small, and its acid character gives it quite opposite effects to those of linseed oil on the cattle which consume it. Farmers must contract not merely for "linseed cake, giving this or that percentage of oil," but for "linseed cake giving this or that percentage of linseed oil."—*The Miller, London.*

Advices from Argentine say that the movement of wheat is small yet compared to the size of the crop, and no certain estimate can be given as to what a fair average will be. It is evident that there will be less poor wheat in Sante Fe, and that samples will be cleaner and very sound, though the berry is somewhat rough. From present appearances there is less smut than was expected from first reports. Entire Barletta is much sounder and drier than last year, and will probably turn out more like Sante Fe. Millers are at present buying the better qualities of Barletta, and it remains to be seen whether the somewhat harsh and poor wheat from the home districts will be shipped separately or mixed with fine wheats from South and

West. There can be no doubt of the greatness of the whole crop, but so far there is very little disposition to sell and very little business doing.

The French Chamber of Deputies has adopted the proposal to increase the import duty on wheat to 7 francs, equal to 36.8 cents per bushel, against 26.2 cents per bushel the former duty. It is expected the advance will go into effect on April 1. During the year ending July 31, 1893, France imported 43,224,000 bushels of wheat, against 109,056,000 bushels for the year ending July 31, 1892, and 43,664,000 for the year ending July 31, 1891.

Unless appearances are more than usually deceiving when taken in regard to the wheat trade in particular, says Beerbohm's *London Corn Trade List*, we would say that the past week had supplied evidence of a firmer feeling and of a disposition to regard the present extraordinary low level as what is called in America the rock bottom. The French demand has ceased on account of the law imposing the new duty of \$2.92 per 480 pounds being put in force, and the quantity afloat has increased considerably. But prices have been maintained both in England and in America.

IMPORTS AND EXPORTS OF FOREIGN BREADSTUFFS.

According to the report of the Bureau of Statistics the total value of breadstuffs imported during January was \$134,370, against imports valued at \$162,865 in January preceding; and during the seven months ending with January breadstuffs valued at \$1,471,784 were imported, against an amount valued at \$1,768,250 imported during the corresponding months ending with January preceding.

Barley aggregating 542,601 bushels, valued at \$245,264, was imported during the seven months ending with January, against 1,530 bushels, valued at \$1,068, imported during corresponding months ending with January, 1893. Corn aggregating 1,622 bushels, valued at \$1,161, was imported during the seven months ending with January, against 1,530 bushels, valued at \$1,068, imported during the corresponding month ending with January preceding. There were 1,603 bushels of oats, valued at \$647, imported during the seven months ending with January, against 5,917 bushels, valued at \$2,107, imported during the corresponding months preceding.

Oatmeal amounting to 279,204 pounds, valued at \$16,389, was imported during the seven months ending with January, against 349,134 pounds, valued at \$18,376, imported during the seven months ending with January, 1893. Rye amounting to 50 bushels, valued at \$37, was imported during the seven months ending with January, against 143 bushels, valued at \$291, imported during the corresponding months ending with January, 1893. There were 894 bushels of wheat, valued at \$691, imported during January, against 79 bushels, valued at \$57, imported during January, 1893; and during the seven months ending with January 872,363 bushels, valued at \$582,651, were imported, against 733,040 bushels, valued at \$520,106, imported during the corresponding months ending with January, 1893. There were 229 barrels of wheat flour, valued at \$1,087, imported during the seven months ending with January, against 326 barrels, valued at \$1,558, imported during the corresponding months ending with January, 1893.

Of imported breadstuffs an amount valued at \$126 was exported during January, against an amount valued at \$86,269 exported during January, 1893; and during the seven months ending with January breadstuffs valued at \$16,785 were exported, against an amount valued at \$342,758 exported during the seven months ending with January, 1893.

Barley amounting to 11,175 bushels, valued at \$5,604, was exported during the seven months ending with January, against 15,124 bushels, valued at \$7,563, exported during the seven months ending with January, 1893. Oatmeal aggregating 280 pounds was exported during the seven months ending with January, against 36,000 pounds, valued at \$650, exported during the seven months ending with January, 1893. There was no wheat exported in January, against 96,615 bushels exported in January, 1893; and during the seven months ending with January 16,715 bushels, valued at \$10,000, were exported, against 472,188 bushels, valued at \$322,635, exported during the seven months ending with January, 1893.

Three Montana farmers head the list of competitors for prizes offered by the originator of the "Lincoln" oats for the largest yield from one bushel of seed of that grain. The product was respectively 174 bushels, 168 bushels and 123 bushels.

"I do not think that the thistle can be entirely eradicated by government legislation," said State Examiner Peabody of North Dakota. "The farms will have to be kept clear by individual effort. A field of wheat of about 500 acres in Richland county, where the soil was sandy (where the thistle thrives best) was entirely ruined by the thistle last year; in fact, it could not be seen that any wheat had been planted. I do not believe that the Red River Valley will be greatly troubled by the weed."

Fires, Casualties, Etc.

Joseph E. Roelkey, grain dealer at Harmony Grove, Md., has suffered a loss from fire recently.

The cottonseed oil mill owned by the Lakeland Oil Company at Lakeland, La., has been burned.

The elevator at Miller, Neb., owned by the Omaha Elevator Company, was recently damaged by fire.

A boiler in an elevator in Sangamon County, Illinois, exploded recently, badly scalding two persons.

The linseed oil mills of H. L. Pope & Co., Dayton, Ohio, were destroyed by fire recently. Loss \$15,000; insured.

The grain elevator conducted by Dr. J. J. Snider at Jamestown, Ohio, was destroyed by fire February 13. Partly insured.

P. W. Dezoll's Crown Elevator at Brown's Valley, Minn., was destroyed by fire March 2. Loss \$3,500; insurance \$1,500.

The boiler in Lockwood's Elevator at Kelley, Iowa, exploded at noon, February 24, killing one man and fatally injuring another.

Karl Rodenbeck, Hartsburg, Ill., fell from a ladder in a grain elevator and sustained severe injuries, from which he is expected to recover.

The grain elevator owned by John W. Stauffer of Laura, Ohio, and 1,000 bushels of grain, was burned February 25. Insured for \$2,500.

Nearly 5,000 bales of hay, stored in a warehouse owned by W. W. Jones, 2011 Market street, Philadelphia, Pa., was burned recently at a loss of \$6,000.

The Nye & Schneider Co.'s elevator at Surprise, Neb., was burned recently, with a loss of about \$5,500; insured. The company will rebuild at once.

The mill of the Griswold Linseed Oil Company at Warren, Ohio, was burned February 18. About 40,000 bushels of flaxseed was consumed. Loss \$250,000; partly insured.

The brewery of Lyons & Sons on Commerce street, Newark, N. J., with a large quantity of grain, has been destroyed by fire. Loss \$15,000 to \$20,000; covered by insurance.

The grain elevators at Nappanee, Ind., operated by Copper Bros. & Zook, narrowly escaped destruction by fire recently. Considerable damage was done to grain, but it was covered by insurance.

Miran & Bergholdt's Elevator at Halstead, Kan., burned February 7, with a loss of \$10,000, a portion of which is covered by insurance. The fire is thought to have been the work of an incendiary.

Klench Bros' flour mill, elevator, warehouses and cooper shop at Oakland, Ind., were destroyed by fire February 26. Loss \$60,000; partially insured. It is supposed to be the work of incendiaries.

The plant of the Griswold Linseed Oil Company at Warren, Ohio, the second largest plant of the kind in the country, was destroyed by fire February 18, causing a loss of between \$250,000 and \$300,000.

The Burlington Elevator at Loup City, Neb., was totally destroyed by fire March 5. Four thousand bushels of grain was consumed. Fully insured. It was believed to be caused by an incendiary.

A fire destroyed the large linseed oil plant of T. J. Preston on the Passaic River in Newark, N. J., on February 13, causing a loss of \$100,000. The plant was 710 feet long and about 75 feet wide. The front was a three-story brick building in which 56,000 bushels of seed was stored. The fire originated in the grain elevator at the rear of the linseed oil plant.

Samuel J. Filbert, while working in the grain elevator at Womelsdorf, Pa., on February 13, fell upon the car track and was knocked senseless. A few feet away a loaded car was backing down toward him. His brother jumped in front of the car, but being unable to pull the prostrate form from the track, he lay down, drawing his brother from the rail and permitted the car to pass above them. The injuries received by Samuel Filbert were thought to be fatal.

The losses of grain men at the recent Duluth Board of Trade fire were as follows: A. D. Thomson, \$2,500, insured for \$1,500; Lake Superior Elevator Company, \$1,500, insured for \$600; Van Dusen-Harrington Company, \$2,600, insurance not given; Duluth Imperial Milling Company, \$1,500, insured for \$500; C. H. Graves & Co., \$700, insured for \$500; Ames-Brooks Company, \$600, insured for \$400; Rose & Lazier, \$500, insurance not given; Walter Turle, \$400, insured for \$250; Charles Canning, \$300, no insurance.

CROP : CONDITIONS.

KANSAS, ATCHISON, ATCHISON Co.—The growing wheat is looking well and promises a full crop for 1894. The acreage is about the same as it was last year.

MINNESOTA, HOFFMAN, GRANT Co.—Wheat seeding has commenced. The snow is gone, and the ground is drying up fast. Seeding will soon be general if the fine weather continues.

SOUTH DAKOTA, ABERDEEN, BROWN Co., March 5.—Seeding operations were commenced. The ground is dry and easily worked, and if the warm weather holds out for a week, immense tracts will be planted.

MINNESOTA, MAPLETON.—The hay crop of Blue Earth County last season was big, and there is going to be a big surplus. If there is any profit in tame hay considerable ought to be picked up in this section.

IOWA, WEST UNION, FAYETTE Co.—It is said that winter wheat in Northwestern Iowa will be practically a failure. The season has been so variable and snow so light that seed in many places has been killed. The acreage, stimulated by the fine yield last season, was quite large.

KANSAS, ELLSWORTH, ELLSWORTH Co.—Wheat in this vicinity is looking well. I think there is a small increase in acreage over last year, and the prospects at present are that we will have a large crop. But in Kansas we cannot tell whether we will have a crop until we have it stacked. H. WORK.

ILLINOIS, PEORIA, PEORIA Co., March 12.—We learn from reports from about 300 stations scattered through the corn and oat belt of Illinois and Iowa that the amount of corn in dealers' hands is 2,716,900 bushels, as compared with 3,272,700 bushels at the same time last year; the amount of oats on hand is 2,528,850, as compared with 4,935,800 at the same time last year. VAN TASSELL & BUNN.

MICHIGAN CROP REPORT, March 8.—The total number of bushels of wheat reported marketed in February was 1,035,127; in the seven months from August to February inclusive, 10,285,039 bushels or about one-quarter of a million bushels less than during the same months last year. The report says that about 40 per cent. of the correspondents report damage during February and 60 per cent. report no damage.

WASHINGTON, WALLULA, WALLA WALLA Co.—It is reported that farmers are sowing wheat, and that the ground is in better condition than it ever has been known to be before, being wet down several feet. This is regarded as almost an assurance of a good wheat crop the coming season. Should a dry season ensue the moisture now stored in the ground would be sufficient for the needs of the growing grain with but little additional rainfall. Unless injured by hot winds a big wheat yield is anticipated this year.

WHEAT ACREAGE.—Throughout the greater part of the wheat sections of the country there is little to indicate a decrease in production this year, excepting in the way of decrease of acreage. It is probable that a final showing will make the winter wheat area lower than usual. Efforts are being made to induce farmers in the Northwest to diversify their crops. It is probable that the acreage of spring wheat, from this cause and others, will be smaller than last year. Among other causes which may reduce the size of the spring wheat crop are low prices and possible difficulties in many instances to procure necessary seed.

GOVERNMENT CROP REPORT.—The statistical returns of the Department of Agriculture for March consist principally of estimates of the distribution of wheat and corn, the amounts remaining in farmers' hands, the proportion of merchantable corn and the average price of both the merchantable and unmerchantable. The report is based upon returns of a corps of correspondents of each county of several states and territories, and also by an independent corps of men reporting through the state agents of the department. All grain in the hands of farmers, including the surplus of previous years, is embraced in the estimates given. The returns of correspondents of the department throughout the great wheat surplus states indicate a new factor in the consumption of wheat, viz., the feeding of wheat to hogs and other stock, a fact due, as declared, to the unprecedentedly low prices, the claim being made that this mode of disposing of the cereal is profitable as compared with marketing it for human food. The returns also indicate that a considerable proportion of the wheat now in farmers' hands comes from crops prior to that of 1893, and especially from the crops of 1891-92. Such stocks have been held principally by large growers. Some damage to such stores is reported from Michigan and Washington. The indicated stock of wheat in farmers' hands is 114,060,000 bushels or 28.8 per cent. of the volume of the crop of 1893. This is nearly 21,000,000 bushels less than the estimate for March 1 last year and nearly 20,000,000 less than the average of the past eight years. The amount remaining in farmers' hands in the eleven principal wheat growing states is about 73,000,000 bushels, or 63.8 per cent. of the

amount in producers' hands in the country at large. The average weight of the crop of 1893, per measured bushel, as calculated from correspondents and millers and state agents, is 57.6 pounds, making the estimated product a little over 381,500,000 commercial bushels, against 306,000,000 measured bushels, as heretofore reported. The corn in producers' hands, as estimated, aggregates 589,000,000 bushels or 36.4 per cent. of the crop of 1893. This proportion is less than for any year in the past five, except that of 1891. The aggregate of corn in farmers' hands in the surplus states of Ohio, Indiana, Illinois, Iowa, Missouri, Kansas and Nebraska is 61.1 per cent. of that in farmers' hands in the entire country, being in quantity 360,000,000 bushels. The proportion of merchantable corn is 85.6 per cent. of a present average value of 34.9 cents per bushel. The unmerchantable averages 32.2 cents per bushel.



The work on the removal of the Board of Trade tower at Chicago has been commenced.

A membership to the Chicago Board of Trade sold on February 23 at \$775 net to the seller.

The Detroit Chamber of Commerce has awarded the contract to a Chicago contractor for a building to cost \$416,000.

In view of the growing hay and straw trade at Philadelphia, Pa., a committee of five was appointed recently from among the members of the Commercial Exchange to consider the subject of a regular inspection for hay and straw and to draw up rules and regulations for the government of the trade.

Wheat and barley met with wine at the brokers' banquet at San Francisco February 25, and when these two meet there is sure to be "a feast of reason and a flow of soul." The banquet was given in honor of the anniversary of the San Francisco Produce Exchange and Call Board Association, and was a fitting celebration—a success in every way.

The directors of the Milwaukee Chamber of Commerce at Milwaukee, Wis., have prepared a series of resolutions which they presented to the board denouncing the Hatch bill as unconstitutional. They arrived at this conclusion from the fact that while the bill pretends to levy a tax on the option business for revenue its real purpose is to kill the business.

A movement is on foot in the Washington Grain Exchange to ask the Central Traffic Association to pay back to shippers or receivers, as interest may appear, the difference in freight between fifth and sixth class on shipments of hay from Jan. 1, 1894, and Feb. 13, 1894. The Washington Grain Exchange asks other exchanges and those interested to take suitable action in regard thereto.

Owing to ill-health Col. George E. Wells, secretary of the Duluth Board of Trade at Duluth, Minn., has tendered his resignation to the board of directors. Mr. Wells has served as secretary continuously since 1887. He has received the greatest praise from the members for his faithful and efficient services rendered, and the directors have testified their esteem by voting to continue his salary until August 1. Frank E. Wyman was elected to fill the office in his place.

William G. Boyd, who has been elected president of Merchants' Exchange at St. Louis, Mo., to succeed the late Alonzo T. Harlow, was born in Richmond, Ky., in 1853. He went to St. Louis in 1882 to accept the position of cashier with D. R. Francis & Bro., which was afterward incorporated as the D. R. Francis Commission Company. Mr. Boyd has been for two years a director of the Exchange and is also a director and treasurer of the D. R. Francis Commission Company.

The representatives of leading commercial exchanges of the United States have agreed upon a course of action in reference to the anti-option bill, which is generally commended by the commercial interests. In a recent meeting a resolution was adopted condemning these bills as detrimental to the trade and injurious to the producing interests, and requesting their representatives in Congress to disapprove of these measures. It was made the sense of the meeting that if any anti-option bill was passed by Congress and approved by the President that it should be ignored and its legality tested in the courts.

At a recent meeting of the West Superior Board of Trade at West Superior, Wis., the members considered the practicability of opening a sample grain market at Superior for the Northwest. The mills at Superior will use about 6,000,000 bushels of wheat yearly, and there is a demand also from the Duluth mills for a sample board. The millers were in favor of the measure and a guarantee fund was raised to carry the board for one year in order that the project be thoroughly tried. Most of the buying has hitherto

been on the Duluth Board of Trade, but the millers of Superior have decided to withdraw their trade from that body.

The millers and grain men of West Superior met at the West Superior Hotel recently and elected for the ensuing year the following officers: R. M. Todd, president; A. A. Cross, first vice-president; C. J. McCollom, second vice-president; J. J. Atkinson, secretary; Peter Deyo, treasurer. The membership fee was fixed at \$100 for 90 days and \$200 afterward; annual dues to be \$35.

George Spencer, president of the Duluth, Minn., Board of Trade, and the biggest grain buyer at that point, says that the telegrams sent from Superior indicating a movement on the part of Duluth grain men to move the Board to Superior are not true. "All buying and selling is practically done at Duluth, and the Duluth Board is stronger to-day than ever." The Board has been offered all the money it wants to begin the construction of its \$300,000 building one block north of its old site." Mr. R. M. Todd, president of the Superior Board, said: "We will either have a consolidated Board at Superior or we will build a Board of Trade here and stop buying our wheat at Duluth."

MEMBERSHIPS ON THE CHICAGO BOARD OF TRADE.

The average business man who hears memberships on the Board quoted at \$1,000 or \$1,200 or \$2,000, or whatever the price may be, imagines that they have a tangible property value like a bond or a certificate of stock. Specialists who buy, sell or loan memberships, most bankers and the officers of the Board know differently, but it will be news to the general public to be informed that memberships carry with them no money value. Signed in blank and put up as collateral for money borrowed they are as worthless as so much blank paper. They are merely certificates entitling the holders to certain "privileges" on the Board. That is all. They are officially and technically described as "privileges of membership." They are not taxable or attachable for debt, and in the possession of any one other than the persons in whose name they are issued, as per the secretary's record, they have no value whatever.

In defining the status of a "privilege of membership" John Gormley, who has dealt in them for years, says: "Two persons cannot own an interest in one at the same time. Books of the corporation show always who that person is. No other can have any claim or interest in it. I have known written agreements to be made and accepted by second parties pledging the certificate for security, which of course, from the very nature of a certificate made it worthless. A party may make a deed, and it may be accepted by another, of a quarter section on the moon, which would have as much real money value as a bill of sale of his certificate. The party in whose name the privilege appears on the books of the Board cannot delegate any ownership to another to act in his place. It is not transferable by possession any more than a club membership certificate. It must first be destroyed before it can be made of value to a second party, before he can enjoy the privileges going with it.

Several years ago attempts were made by attachment proceedings to compel the owner to give up his privileges on the Board, which came to naught. Also mandamus proceedings were instituted against the directors to compel them to return a membership to its rightful owner, who had not received its full value. The folly of those proceedings can readily be understood. The history of this identical membership was total annihilation. The possessor was suspended for non-fulfillment of contract, the ticket was forfeited to the Board for non-payment of dues. We have monthly privileges of admission for \$10. We have yearly privileges for \$1,000. The former grants admissions only, the latter admissions and commercial privileges. Either of the two are worthless in the possession of a second party.

The question is often asked What is a Board of Trade membership worth? The question should be, What will the privileges of the Board of Trade cost me per month or per year? As a collateral security for a loan it is wholly worthless. If any business man or lawyer tells you he can draw up papers or agreements making such certificate of the least cash value to a second party he is either a swindler or an ignoramus. The courts may issue an injunction preventing the disposal of a membership, but cannot bring a mandamus compelling the disposal of one, simply because there is no property value in the privilege itself.

Corn exports last month aggregated 8,580,850 bushels, as against 3,107,617 bushels in January, 1893, and current weekly clearances are two or three times larger than they were at the corresponding period last year. All breadstuffs exports in January were valued at \$13,331,708, as against \$13,925,161 in January last year. This favorable showing in the face of the shrinkage in wheat shipments and the great fall in prices having been due mainly to the larger exports of corn and flour.

LATE PATENTS

Issued on February 13, 1894.

COMBINED CORN SHELLING AND GRINDING MACHINE.—Le Grand Hinffen, Chicago, Ill. No. 514,656. Serial No. 469,920. Filed April 11, 1893.

ELEVATOR AND DUMP.—Elmer E. Barton, Warrensburg, Ill. No. 514,535. Serial No. 479,355. Filed July 1, 1893.

GAS ENGINE.—Chas. S. Hisey, Aurora, Ind. No. 514,713. Serial No. 446,128. Filed Sept. 17, 1892.

GRAIN CLEANER.—Jas. C. Ross, Jr., Joliet, Ill. No. 514,498. Serial No. 471,516. Filed April 22, 1893.

Issued on February 20, 1894.

BALING PRESS.—Jas. W. Martin, Omaha, Neb. No. 514,950. Serial No. 458,704. Filed Jan. 17, 1893.

FLAX SEPARATOR.—Joseph Benesh, Racine, Wis. No. 514,899. Serial No. 475,740. Filed May 27, 1893.

GAS MOTOR.—Karl A. Jakobson, Christiana, Norway, assignor to L. A. Enger & Co., same place. No. 514,996. Serial No. 454,976. Filed Dec. 13, 1892.

GAS OR PETROLEUM MOTOR.—Henry M. L. Crouan, Paris, France. No. 515,116. Serial No. 471,772. Filed April 25, 1893.

GRAIN SHOVEL.—James Scriba, assignor of one-half to Edward C. Fradenburg, Oswego, N. Y. No. 515,112. Serial No. 386,791. Filed March 28, 1891.

HAY PRESS.—Louis Primeau, Beauharnois, Canada. No. 515,013. Serial No. 473,827. Filed May 11, 1893. Patented in Canada Dec. 19, 1892. No. 41,319.

GRAIN MEASURING, REGISTERING AND SACKING MACHINE.—Jacob U. Tector, Hagerstown, Ind. No. 515,177. Serial No. 474,003. Filed May 12, 1893.

Issued on February 27, 1894.

BALING PRESS.—Plin C. Southwick, Sandwich, Ill. No. 515,373. Serial No. 486,440. Filed Sept. 25, 1893.

GRAIN CAR DOOR.—Joseph H. Goode, Wm. H. Anthony and Thos. S. Lloyd, Richmond, Va. No. 515,672. Serial No. 473,524. Filed May 9, 1893.

DRYING AND COOLING APPARATUS FOR GRAIN.—Geo. W. Bisbee, Chicago, Ill., assignor of one-half to Merrick F. Prouty, same place. No. 515,513. Serial No. 497,720. Filed Nov. 20, 1891. Renewed Jan. 22, 1894.

GAS ENGINE.—Ernest Narjot, San Francisco, Cal., assignor to Henri Vayre, same place. No. 515,530. Serial No. 441,962. Filed Aug. 2, 1892.

GRAIN SEPARATOR MACHINE.—Wm. H. Webb, Longmont, Colo. No. 515,542. Serial No. 473,772. Filed May 11, 1893.

BARLEY OR OTHER GRAIN WASHER.—Jules Saladin, Nancy, France. No. 515,618. Serial No. 461,204. Filed Feb. 6, 1893.

Issued on March 6, 1894.

BALING PRESS.—Has. Clark, Kansas City, Kan., and Peter De Long Myers, Kansas City, Mo. No. 515,748. Serial No. 474,037. Filed May 12, 1893.

BALING PRESS.—Moses C. Nixon, Omaha, Neb. No. 515,786. Serial No. 457,935. Filed Jan. 10, 1893.

BEAN SEPARATOR.—Edgar Knapp, Middleport, N. Y. No. 515,776. Serial No. 380,539. Filed Feb. 6, 1891.

GAS ENGINE.—John W. Hartley and John Kerr, Kilmarnock, Scotland. No. 515,770. Serial No. 465,233. Filed March 9, 1893.

OSCILLATING GRAIN METER.—Daniel Wilde, Washington, Iowa. No. 516,143. Serial No. 471,778. Filed April 25, 1893.

MALT KILN AND METHOD OF DRYING MALT.—Wm. H. Prinz, Chicago, Ill., assignor to the Saladin Pneumatic Malting Construction Company, same place. No. 515,840. Serial No. 468,063. Filed March 28, 1893.

METHOD OF AND APPARATUS FOR MALTING GRAIN.—Wm. H. Prinz, Chicago, Ill., assignor to the Saladin Pneumatic Malting Construction Company, same place. No. 515,811. Serial No. 468,064. Filed March 28, 1893.

EXPIRED PATENTS.

[The following patents have expired since our last issue.]

BALE TIES.—G. F. Jones, Scranton, Pa. No. 187,284.

GRAIN DRIERS.—Jose Guardiola, Chocoma, Guatemala. No. 187,268.

HAY PRESSES.—P. K. Dederick, Albany, N. Y. No. 187,220.

HORSE POWERS.—J. H. Elward, St. Paul, Minn. No. 187,366.

DISCHARGE NOZZLES FOR GRAIN ELEVATORS.—F. J. Kimball, Philadelphia, Pa. No. 187,536.

GRAIN SEPARATORS.—Alfred Huntington and John Hicks, Milwaukee, Wis. No. 187,634.

HORSE POWERS.—T. E. Adams, North Evans, N. Y. No. 187,501.

HORSE POWERS.—Reuben Leonard, Oakland Mills, Pa. No. 187,646.

BALE TIES.—B. Hempstead, Little Rock, Ark. No. 187,758.

CORN CRIBS.—Chas. E. Davis, Ackley, Iowa. No. 187,750.

CORN SHELLERS.—J. M. Hawley, Odin, Ill. No. 187,850.

GRAIN SEPARATORS.—J. D. Van Dusen, Auburn, N. Y. No. 187,739.

GRAIN SCALES.—P. H. Cherry, Parsons, Kan. No. 187,813.

BALING PRESSES.—N. H. Collins, Bayville, La. No. 188,104.

GRAIN SEPARATORS.—T. Harrison and W. C. Buchanan, Belleville, Ill. No. 188,050.

GRAIN SEPARATORS.—J. W. Kline and P. Mason, Chicago, Ill. No. 188,060.

GRAIN SEPARATORS.—Jas. S. Upton, Battle Creek, Mich. No. 188,210.



Leo Peil, a well-known business man of Racine, Wis., will be the manager of the new Racine Hardware Company.

Mr. James Green has been elected agent of the Farmers' Elevator Company at Hampton, Iowa, for the ensuing year.

William G. Boyd has been elected president of the Merchants' Exchange at St. Louis, Mo., to succeed Alonzo T. Harlow, deceased.

Mr. A. Matthews, one of the largest grain dealers of Ballinger, Texas, since 1886, recently sold out his stock and is thinking of locating in Ft. Worth.

General Becker of Minnesota, whose friends have asked the president to name as successor to Judge McDill, deceased, is a member of the Interstate Commerce Commission. Mr. Becker is a practical railroad man, and has served as member of the Minnesota Railroad and Warehouse Commission for the last twelve years.

RICE IMPORTS AND EXPORTS.

According to the latest report of the Bureau of Statistics rice aggregating 510,500 pounds, valued at \$18,571, was imported free of duty under reciprocity treaty with Hawaiian Islands during January, against 786,000 pounds, valued at \$29,975, imported in the preceding January; and during the seven months ending with January 4,656,083 pounds, valued at \$185,725, were imported, against 6,875,500 pounds, valued at \$292,480, imported during the seven months ending with January, 1893.

Of rice imported free of duty 50 pounds, valued at \$2, was exported in January, against 500 pounds, valued at \$24, exported in January, 1893; and during the seven months ending with January 8,670 pounds, valued at \$309, was exported, against 54,469 pounds, valued at \$1,509, exported during the seven months ending with January, 1893.

Dutiable rice amounting to 9,455,892 pounds, valued at \$137,471, was imported during January, against 4,348,194 pounds, valued at \$74,138 imported during January, 1893; and during the seven months ending with January 26,389,025 pounds, valued at \$417,903 was imported, against 36,741,781 pounds, valued at \$652,720, imported during the seven months ending with January, 1893.

Of dutiable rice we exported 848,650 pounds, valued at \$14,985, in January, against 670,196 pounds, valued at \$13,595, in January preceding; and during the seven months ending with January we exported 6,583,419 pounds, valued at \$118,348, against 5,815,908 pounds, valued at \$119,170, exported during the seven months ending with January, 1893.

Rice flour, rice meal and broken rice aggregating 3,868,345 pounds, valued at \$59,521, was imported in January, against 3,639,099 pounds, valued at \$65,327, imported during January preceding; and during the

seven months ending with January 32,434,211 pounds, valued at \$498,705, were imported, against 38,776,357 pounds, valued at \$720,326, imported during the seven months ending with January preceding.

Of imported rice flour, rice meal and broken rice none was exported in January and none in January preceding. There was none exported during the seven months ending with January, against 81,230 pounds, valued at \$1,700, exported during the seven months ending with January preceding.

INVESTIGATING METHODS OF PUBLIC WAREHOUSEMEN.

The receivers and shippers at Chicago, who have no love for the public warehousemen because they have been absorbing their business, recently instituted an investigation of the charges that the public warehousemen were delivering skin grade grain to outsiders and keeping the best of each grade to give out in cancellation of storage certificates held by themselves.

A committee was appointed by the Board of Trade and after several members resigned it was reorganized. Several meetings were held and a number of witnesses testified. Most of the evidence went to show that the firms dealing in grain and having their own elevators discriminated in favor of themselves, and that the grade of grain suffered in consequence. One witness testified to buying a cargo of grain from an elevator company which had just shipped out considerable grain of the same grade. He said he was swindled, as the grain delivered to him was of far poorer quality than that sold by the elevator company, and he was given the "leavings" from its shipment.

No formal action has been taken against the practice and neither the receivers nor shippers who are being forced out of the trade by the elevator companies are hopeful that a remedy can be found. The trade, they agree, seems destined to pass into the hands of a few powerful houses which control elevators. There are 100 grain receiving houses which find their business gone on account of the elevator companies buying grain in the West for their own elevators. The elevator companies have gone into shipping grain and now threaten to drive the old-time shippers from the field. All kinds of abuses are said to have arisen out of public warehousemen being actively in the trade. They skim a big profit off high-grade grain from which the producer gets no returns, it is charged, but no one has yet found a way to remedy matters.

One prominent elevator man said: "These receivers expect to do business by having business come to them. They would not advertise or spend a postage stamp for the sake of attracting business. With us elevator people it is different. If there is a lot of grain which the railroad connecting with our elevator in Chicago does not receive we are called down for it. To-day there was a big lot of grain which our railroad lost, and I was called in to account for it. I found that our quotations were made at a cent below that which took the grain by some other route. The receivers do not reach out for business, and somebody must do it. There is not an elevator company in Chicago but would prefer having the grain brought here by the receivers, but so long as they do not do it we must reach out for it. The time is past in the grain trade when a man can sit in his office and wait for trade to come to him. That is the whole difficulty, and this committee now at work will solve the question if it induces the receivers to get out and rustle for business and advertise like other people."

P. B. Weare, the head of the English syndicate houses, said he could find no law which prevented elevator companies dealing directly in grain, but if one existed the business could be done as well by brokers.

The handlers of "cash stuff" on the Board of Trade constitute a powerful element in that organization. For years they have been bitterly opposed to methods pursued by the elevator people. Primarily they insist that public warehouses are designed specifically for the storage of grain at certain fixed rates. The law constitutes them public custodians of valuable property which is bought and sold in an open market daily. As such, the receivers claim, the elevator proprietors have no right to enter the market as buyers and sellers. If they do so, they not only encroach upon the legitimate business of grain merchants, by using their powerful influence and almost unlimited capital to divert trade in their direction, but, moreover, are guilty of an impropriety at least in turning to their private advantage the privileges granted them in their public capacity.

It is said to be the intention of the committee to lay the facts before the railroad and warehouse commissioners and endeavor to obtain a ruling from them prohibiting the elevator men from engaging in the grain business otherwise than as owners of storehouses. The warehouses are licensed by the state as storehouses only and the owners are supposed to act merely as agents or custodians, having in their keeping the corn, oats and wheat belonging to commission men who do not own elevators. The committee holds that elevator men have no right to engage in the grain trade, as their ownership of licensed warehouses gives them an unfair advantage over men who buy and sell only. Besides, their license gives them no such privilege.

PRESS COMMENT.

THE GOVERNMENT AIDING FARMERS.

If the government will clear away the Russian thistle this year for that class of indolent earth-diggers who permit alien things to grow up in their fields unchallenged, it may be expected that next year a call will be made by the denizens of another section for the removal of sagebrush or cornstalks, as the case may be. The federal government has no more business grubbing thistles than it has running a brickyard and building houses for farmers.—*Modern Miller*.

THE NEW ANTI-OPTION BILL.

Despite the care taken to disguise it, the wolf's fangs are exposed beneath the sheep's fleece in this measure. It is an insidious effort to assert a dangerous prerogative—the right of the government to regulate and interfere with the legitimate private concerns of the citizens, and to give control of the markets of the world into the hands of a few monopolists, who can, by manipulating the prices of agricultural products, hold the farmers at their mercy.—*St. Paul Globe*.

SHIPPERS SHOULD STUDY MARKETS.

Shippers should study carefully the quality or grades that are desired in the various markets. A good grade of clover and timothy mixed will sell in some markets nearly as well as No. 1 or straight timothy; while in another market taking the same rate of freight it will scarcely sell at all at any price. It should be your study to become familiar with what is wanted. It is well and good to educate consumers in the merits of that which you have, but start the educating before you start much stuff.—*Hay There*.

A PERTINENT POINT.

A correspondent raises the pertinent point that if the state of Minnesota cannot build and operate elevators in competition with wheat dealers, because, as Judge Mitchell has decided, "it (the state) cannot engage in trade itself in competition with its citizens," it cannot lawfully establish and operate a twine plant and go into the twine trade in competition with implement dealers. It does seem "that if the state has a right to go into the twine business it also has the right to engage in the grain business," or that if it has not the right in the one case it has not in the other. Our laws are queer and so are court decisions.—*Farm Implement News*.

GRAIN DAMAGED BY TAR PAPER.

An experience had with some damaged wheat taken from a number of vessels in Buffalo, which damage was due to the use of tar paper between deck hatches, suggests the possible inutility of that article in connection with car construction. It appears that the odor of the tar had permeated the grain so as to effect a material reduction in its market value, nor could this odor be removed by the use of blowers. The hint furnished by this occurrence is a valuable one and may serve to prevent possible loss to the railways by the exclusion of this material should an attempt be made to use it in car building.—*Railway Review*.

ERROR OF ANTI-OPTIONISTS.

The underlying error in the reasoning of those who advocate anti-option legislation in the interests of the farmer lies in the fact that they do not appreciate the immense interests which are involved in the grain markets. The features of speculation which are objectionable are unduly exaggerated by those who attempt to interfere with the trading on Boards of Trade. There are some influences and some elements in the business which might be advantageously abolished, but they constitute such a small part of the aggregate interests involved that the effort to destroy them by prohibiting all trading in futures is as foolish as a proposition to pull down a great building because one room in it is unfit for habitation.—*Cultivator, Kansas City*.

PUBLIC WAREHOUSEMEN ARE ANGELS.

The elevator men of this city deny in toto the allegations made by certain shippers that unfair advantage is taken in sorting good grain out of grade and selling it by sample, while only the poorest grade grain that will pass is delivered on contract. The shippers say that this is done at some of the elevators, and declare they will prove it if called before the committee of the Board of Trade appointed to investigate the subject. The elevators referred to belong to the class which take in and store grain for the public, while their proprietors or managers buy and sell grain on their own account or for syndicates of which they are members. If this sorting out be not done, the men who conduct the business of buying and selling property which is mixed in with that of

the public so as to lose its identity must be angels. They are far superior to the average run of humanity. The chance which such an arrangement affords them for judicious discrimination in their own interest is so great, and that of detection so small, that those men are entitled to extra credit if they do not avail themselves of it, and the fact ought to be known. If the facts be as they claim, they deserve little short of canonization.—*Chicago Tribune*.

MUST MAINTAIN THE ERIE CANAL.

There is great and increasing need to do everything possible to make the canal system of the state more useful to its commerce. This city is greatly interested, or would be if its merchants knew what is for their advantage. Last week the *Manufacturers' Record* announced a railroad deal by which grain shipments from 3,500 miles of the Chicago & Northwestern Railroad system will be sent to Europe by way of the "Big Four" and the Chesapeake & Ohio Railroads and the line of steamers sailing from Newport News. By this operation New York is a loser. Yet we see such schemes of diverting business from this port going on with strange unconcern. One way of preserving our commercial supremacy is by maintaining the highest efficiency and the natural cheapness of our great internal water highway. Yet year after year passes and nothing is accomplished which the interested and greedy railroad corporations do not consent to have done. They and not the people appear to control the lawmaking body.—*The World, New York*.

RAILWAY AGREEMENTS NO STANDING IN COURTS.

If any additional evidence were needed to establish the fact that the interstate law should be so amended as to provide for a recognition in court of railway traffic compacts, it may be supplied from the record of the past week, where it appears that, because of differences of opinion, a single road virtually destroys one agreement and greatly impairs the value, if not absolutely endangers the life, of another. The question of justification, so called, is not here referred to, but only the fact that under present conditions roads for any reason, or for no reason, may at their pleasure destroy any traffic compact that may be at present entered into by them without any fear of being called upon, except by way of retaliation, to account for the damages thereby occasioned. Aside from the related question of pooling, this is a subject that ought to command attention. Railway agreements should be placed in the same category as other agreements. There would appear to be no good reason why they should ever have been otherwise regarded, but it is nevertheless apparent that as a rule they are supposed to have no standing in court.—*Railway Review*.

OUR CARD BASKET

We have received calls from the following gentlemen prominently connected with the grain and elevator interests, during the month:

H. R. Heath, Fort Dodge, Iowa.
J. Silas Leas of the Barnard & Leas Manufacturing Company, Moline, Ill.
L. S. Hogeboom, representing the Knickerbocker Company, Jackson, Mich.
G. L. Meade representing the Case Manufacturing Company, Columbus, Ohio.

HAY IMPORTS EXCEED EXPORTS.

Hay aggregating 9,546 tons, valued at \$83,560, was imported in January according to the last report of the Bureau of Statistics, against 8,702 tons, valued at \$75,658, imported in January, 1893; and during the seven months ending with January 40,090 tons, valued at \$361,381, were imported, against 46,274 tons, valued at \$426,337, imported during the seven months ending with January, 1893.

Of imported hay none was exported in January and none in January, 1893; and during the seven months ending with January 192 tons, valued at \$1,690, were exported, against none exported during the seven months ending with January, 1893.

We exported 6,177 tons of domestic hay, valued at \$99,362, in January, against 3,759 tons, valued at \$60,162, exported during January, 1893; and during the seven months ending with January 29,784 tons, valued at \$488,997, were exported, against 20,233 tons, valued at \$327,413, exported during corresponding months ending with January, 1893.

If we do not want Canada to step in and beat us in our own markets we must be up and doing. The Wilson bill is a purely "protection" measure from the Canadian point of view so far as the hay and grain business is concerned, and it behooves hay raisers and shippers generally to bestir themselves if they do not want this particular brand of protection illustrated to a nicety. The Wilson bill is aiming with deadly direction at the interest of every hay raiser and shipper in the country.—*Hay There*.

SELLING SHORT.

Selling wheat short on the Chicago Board of Trade is one of the most profitable speculations that ever tempted people from more legitimate styles of business, says a Chicago daily. Ed Pardridge, who never was in the grain business in his life in the way of handling the actual stuff, has made millions selling it short. To those who have no knowledge of the routine of dealing in futures it may be necessary to explain in what way people without any special knowledge of the grain trade have been able to make millions selling wheat short, while experts in the business with a predilection for buying before selling have remained poor.

It arises from the following custom of the trade: Take the price of cash wheat for instance; it is $4\frac{1}{2}$ cents per bushel less than the price for May delivery. A person, therefore, who will sell May wheat now cannot lose anything by the operation unless the cash value of the article shall advance more than $4\frac{1}{2}$ cents between now and May, and there is an even chance that it may decline instead of advancing. If there should be no change in the actual spot value of the article, the seller for May delivery can buy, when the time comes around, the wheat he sold—"short," as it is termed—and pockets the $4\frac{1}{2}$ cents premium which the buyer for May delivery originally engaged to give. The first seller might then make a still farther step ahead, and keep reaping for an indefinite time the profits in the premiums, which of late years have always prevailed for wheat sold for future delivery.

The immense profit in such a speculation was being talked over on the Board of Trade, and the following was mentioned by one of the veterans in the business as having happened within his own knowledge: A one time prominent wheat speculator of Milwaukee, Edward Sanderson, who is no longer alive, advised an impecunious friend to sell short 1,000 bushels of wheat as a provision for his daughter on the day of her birth, eleven years ago; not only to sell it, but to keep selling it afresh every time the delivery period matured. The wheat was sold originally at $69\frac{1}{2}$ cents per bushel and is still being sold every time the period for delivery matures. The accumulated premiums so far have amounted to \$1.75 per bushel, or a total of \$1,750 in eleven years, all made from a sale of 1,000 bushels, the original quantity never having been increased. Mr. Sanderson himself is reported to have lived in affluence on the profits of 25,000 bushels of wheat sold short in a similar manner. A gold mine "is not in it" in comparison.

SEED EXPORTS.

According to the report of the Bureau of Statistics, seeds valued at \$675,749 were exported during January, against an amount valued at \$173,447 exported in January preceding; and during the seven months ending with January seeds valued at \$6,766,877 were exported, against an amount valued at \$3,053,407 exported during the seven months ending with January preceding.

Clover seed aggregating 5,748,141 pounds, valued at \$584,104, was exported during January, against 898,147 pounds, valued at \$117,365, exported in January, 1893; and during the seven months ending with January 37,207,543 pounds, valued at \$3,746,156, were exported, against 6,775,529 pounds, valued at \$796,177, exported during the seven months ending with January, 1893. Cotton seed aggregating 1,725,040 pounds, valued at \$12,626, was exported in January, against 725,629 pounds, valued at \$5,894, exported during January, 1893; and during the seven months ending with January 2,955,006 pounds, valued at \$22,126, were exported, against 3,150,092 pounds, valued at \$20,400, exported during the corresponding months ending with January, 1893.

Flaxseed or linseed amounting to 11,287 bushels, valued at \$13,324, was exported in January, against 2,721 bushels, valued at \$3,850, exported during January, 1893; and during the seven months ending with January 2,047,229 bushels, valued at \$2,425,462, were exported, against 1,616,607 bushels, valued at \$1,936,680, exported during the seven months ending with January, 1893. Timothy seed amounting to 364,954 pounds, valued at \$19,877, was exported in January, against 348,033 pounds, valued at \$21,767, exported in January preceding; and during the seven months ending with January 5,295,096 pounds, valued at \$233,715, were exported, against 2,203,812 pounds, valued at \$101,905, exported during the same months ending with January preceding. All other seeds aggregating an amount valued at \$45,818, were exported in January, against an amount valued at \$24,571 exported in January, 1893; and during the seven months ending with January all other seeds valued at \$339,418 were exported, against an amount valued at \$198,245 exported during the corresponding months ending with January, 1893.

Broom corn valued at \$22,161 was exported during the month of January, against an amount valued at \$12,470 exported during January preceding; and during the seven months ending with January broom corn valued at \$150,238 was exported, compared with an amount valued at \$90,876 exported during the corresponding months ending with January preceding.

Latest Decisions.

Landlord and Tenant—Crop Lien.

The Supreme Court of Georgia held, in the recent case of Cofer vs. Benson et al., that where a tenant had mortgaged his whole crop, and this mortgage was duly recorded, and his landlord had thereafter received enough of the crop, on which he had a special lien for rent superior to the mortgage, to satisfy his claim for rent in full, this claim was discharged relatively to the mortgage and the right of the latter to collect his mortgage debt out of that part of the crop not delivered to the landlord. The court said that the tenant had no power to consent to any application by the landlord of the subject-matter of the lien for rent which would leave that lien in force to the prejudice of the mortgagee, relatively to so much of the crop as the landlord did not receive.

Insurance Policies Should Be Scrutinized Before They Are Accepted.

It does not pay to trust entirely to insurance companies and their agents to fix up insurance. The insured must be held, according to a recent decision of the Supreme Court of Michigan (Wierengo vs. American Fire Ins. Co., 57 N. W. Rep. 833), to some degree of diligence in obtaining knowledge of the contracts to which they are parties. Ignorance will not relieve a person from his contract obligations. To illustrate this, an insurer is not required by the law to inquire into the condition of the title to the property insured, or to inform the owner of all the conditions and terms of the policy to be issued, or to read it to him, or inform him of its contents. When received and accepted without objection he must be held bound by its terms, unless these terms are waived by the insurer.

Delivering Grain Below Grade Stored.

The case of Dailey Bros. vs. the Minneapolis & Northern Elevator Company at Devil's Lake, N. D., has been appealed to the Supreme Court of that state. In March, 1892, Dailey Bros. placed in store with the Minneapolis & Northern Elevator Company 564:41 bushels of No. 2 Northern wheat, it being agreed that the grain was to be delivered on demand. In July, 1892, Dailey Bros. demanded the wheat, and received through the elevator company's agent what was represented as being the same grade and quality which the elevator company agreed to deliver. Dailey Bros., relying on the representations of the company, took the wheat, but found that it was not of the grade or the quality as that which they had stored, but was inferior, being No. 3 Northern and worth 10 cents per bushel less than No. 2 Northern, which the elevator company contracted to deliver. Dailey Bros. brought suit for \$50. A verdict in their favor being returned the elevator company appealed the case.

Additional Compensation Cannot be Claimed in Absence of a Contract for Eight Hours.

John Grissell's suit against the Noel Bros. Flour and Feed Company of Indianapolis, Ind., has been decided by the Appellate Court in favor of the company. Grissell drove a delivery wagon for Noel Bros. from May 27, 1890, to March 12, 1891, receiving \$1.25 a day for his services. After he left their employ he concluded to sue them under the eight-hour law for overtime, claiming he had worked almost every day until 9 or 10 o'clock at night. He brought suit in a justice's court, and the case was taken to a special term of the Mariou Superior Court, where he secured a judgment for \$125. The defendants appealed to the general term of the Superior Court, which reversed this judgment. Grissell then carried the case to the Supreme Court, which tribunal ordered it transferred to the Appellate Court, where the decision of the lower court in general term was affirmed. The ground of the appeal was simply that the court in general term erred in reversing the judgment of the court in special term. The theory of the appellant was that under the eight-hour law he was entitled, without special agreement, to receive extra pay for all time he worked over eight hours a day. The general term, in reversing the first judgment, held that the evidence was not sufficient to warrant Grissell's recovering any money from defendants on his claim. In disposing of the case in favor of the company, the Appellate Court's opinion, written by Judge Reinhard, says, among other things:

"It was not intended by the statute in question to abridge the right of contracting for a greater number of hours than eight in any calendar day, and any attempt to do so must inevitably fail of the result desired for the abundant reason that the reduction of the hours of labor would inevitably be followed by a corresponding reduction in the rate of compensation, and would in the end leave the parties in the condition they were in before the law was enacted.

"The appellant must recover, if at all, either upon an express contract or an implied one. If one person employs another to perform a single day's labor for him at \$1.25, and at the end of that day the employer

pays the laborer \$1.25 and the latter accepts it in payment of the day's work, he cannot afterward recover an additional sum, albeit he may have worked nine or ten or eleven hours instead of eight hours, and notwithstanding the law under examination makes eight hours a legal day's work. The same rule applies when the work is done by the week or month or year. There can be no doubt but that in the present case the appellee paid and the appellant accepted at the end of each week the sum of \$7.50 in full payment of the work done by him during the previous week.

"By continuing in his employer's service under the terms of the employment appellant waived any right to claim additional compensation." The court says it has not been able to find a single authority in support of the contention that under such a statute as the one relied upon a laborer who works more than eight hours in twenty-four may recover for extra services in the absence of a special or implied contract to that effect. The evidence, it thinks, did not warrant the jury in the lower court returning a verdict for the appellant for any amount.

Cannot Inspect Books.

Judge Blanke has made an important ruling in the Board of Trade suit of Lamson Bros., against Boyden & Co. to recover \$42,000 which the plaintiff claimed to have paid to defendants during a "corner" in the market, manipulated, it is claimed, by the defendants. He decided that Boyden & Co. could not be made to bring their books into court for inspection.

The case has been heard by the court alone and excited considerable attention, it being the first suit of this nature ever tried in the state of Illinois.

The case arose from fluctuation in the price of corn in September, 1889. During the last few days of that month No. 2 corn for November delivery advanced from 33 cents to 60 cents a bushel. From 10 o'clock on the morning of November 29 until 11 o'clock on the morning of November 30, the price fluctuated between 34½ cents and 58 cents a bushel, but finally remained at 32½ cents. Lamson Bros., it is claimed, were short on their own account.

The plaintiff sought to compel Boyden & Co. to produce their books showing all the corn purchased by them for delivery in November or which they held in warehouses. They contended that the defendants were under obligations to surrender their books to the inspection of the court for the purpose of enabling Lamson Bros. to recover back money they had paid in settlement of "short" contracts for the delivery of corn in November. On the part of Boyden & Co. it was contended that the purchase of corn by Lamson Bros. at 58 cents a bushel was a voluntary purchase, not made under duress of circumstances, but a purchase made in the ordinary course of business in the open market, and as the evidence showed, without protest or complaint, and that in no event were the defendants under legal obligations to surrender their books of accounts, showing their business transactions for that month, for the purpose of furnishing evidence to enable Lamson Bros. to recover a penalty or forfeiture imposed by the state for "running a corner."

Judge Blanke held with the defendants upon constitutional grounds that every citizen is to be secured from unreasonable search or seizure of his property where the object of such search might disclose evidence which would submit the citizen to a penalty.

An Interesting Option Case.

The Appellate Court at Chicago has handed down a decision in the case of Thomas J. Sutherland against Charles Schwartz, appellant, reversing a verdict of \$17,000 against the latter. The decision involved and recalled a celebrated Board of Trade litigation, which has traveled from the lower to the Appellate and Supreme Courts several times and has received altogether in its various branches nine or ten trials. Charles Schwartz, the defendant in the present case, and J. T. Lester, defendant in former trials, are dead. It was stated yesterday that the Appellate Court's decision would probably bring the long litigation to an end.

Charles Schwartz was a partner of John T. Lester and the two, with S. W. Allerton and E. K. Willard, carried on a commission business in grain and stocks. In the early 80's Sutherland began operating through them in stocks. Between January, 1881, and May, 1883, his dealings amounted to \$900,000. Sutherland's margins ran low and he put up as additional margin 500 shares of Wabash preferred and 100 shares of Louisville and Nashville. This stock was sold out by the firm to make good, it was said, Sutherland's losses. The latter sued the firm for \$50,000, claiming it had no right to sell the stock.

After this suit was filed another action was begun by Samuel Berkowitz against Lester & Co. to recover several hundred thousand dollars. Berkowitz proceeded under a statute of Illinois defining gambling in grain. It empowered anyone to bring suit to recover three times the amount of another's losses, the sum recovered to be divided equally between the plaintiff and the county. This last action aroused the deepest interest on the Board of Trade. It was thought that, if successful, no end of similar suits would be brought. An order was secured requiring the production of Lester & Co.'s books. That order, if obeyed, it was

alleged, would have furnished evidence in both cases. The order was disregarded and the ensuing contempt proceedings were twice taken to the Supreme Court. That tribunal reversed the order made against the firm in each case. In the meantime J. T. Lester died, and in subsequent litigation Allerton and Willard were dismissed as defendants.

In the last trial Charles Schwartz set up the defense that Sutherland's losses, if any, were made after September, 1882, when the former left the firm. Judgment for \$17,000 was rendered against him, and the case went to the Appellate Court. Mr. Schwartz died last fall, and his executors were substituted as defendants. The argument made by the defendants was that it was not necessary that Charles Schwartz should plead; he was not jointly liable. If proof were shown that he was not that was sufficient. The Appellate Court held he had a perfect right to show he was not a member of the firm at the time the losses were made.

STORAGE CAPACITY AND RATES AT SUPERIOR.

The changes made in the grain elevators of Superior in 1893 place this city ahead of all other lake ports for grain storage capacity except Chicago, says the *Telegram* of Superior, Wis. Last year the elevator capacity was increased from 8,000,000 to 14,675,000 bushels. These elevators are all built in the most modern style, with best shipping and receiving facilities. This capacity is made up as follows:

	Bushels.
Great Northern (Nos. 1 and 2).....	3,500,000
Sawyer Elevators (Nos. 1, 2 and 3).....	5,000,000
Terminal Company (Nos. 1 and 2).....	2,500,000
Belt Line Company (Nos. 1 and 2).....	2,500,000
Russell Miller Company.....	300,000
Lake Superior Milling Company.....	300,000
Anchor Mill Company.....	200,000
Listman Mill Company.....	125,000
Minkota Mill Company.....	200,000

Total elevator capacity.....14,675,000

During 1894 the Freeman Milling Company will erect an elevator of 250,000 bushels' capacity and negotiations are pending for a classifying and other elevators which will be consummated during the current year and which will add another three millions to the present capacity.

The present rates for storage in Superior are:

Receiving, including 15 days' storage.....	1¼ cents per bu
Storage for each succeeding 15 days.....	½ cent per bu
Cleaning.....	½ " "
Transferring wheat, oats and corn.....	¼ " "
Transferring other grain.....	1 " "

Winter rates are 1½ cents per bushel for receiving and first fifteen days' storage, ½ cent per bushel for each succeeding fifteen days or part thereof until 4 cents per bushel has accrued, including the 1½ cents handling charges, after which no additional storage shall be charged until the 15th of May. The rates on grain that earned winter storage will be ½ cent per bushel for each fifteen days or part thereof from May 15 to September 1.

Winter storage begins November 15 and ends May 15.

WAREHOUSE REGISTRAR MUST SIGN IN INK.

At a recent meeting of the Illinois Railroad & Warehouse Commission the board changed rule 15 governing the registration of grain so as to provide that it shall be the duty of the warehouse registrar to keep a registration book for each elevator of class "A" doing business in Chicago, in which shall be entered a correct description of each warehouse receipt that may be registered. When such receipts are presented for registration the said registrar shall carefully compare the same with the returns which shall have been made to him by the inspectors stationed at the respective elevators, and if he shall thereby be satisfied of the correctness of the same he shall sign his name in ink, giving the date of such presentation, with the title of his office.

In the absence of the registrar such certificates may be signed by some employee in the registration department authorized by the registrar to sign his name, in which event the name of such person so authorized to sign the name of the registrar, as aforesaid, shall also sign his own name in full to the said certificates; but if he shall find that any differences exist he shall institute a thorough examination into the reasons therefor and shall have such error corrected before affixing his signature to said certificate, and if it shall appear that any fraud in the issuance of such receipts shall have been attempted by the warehousemen the said registrar shall at once report the same to the commission.

While it may be true that the American hog can not be cornered, says the Cincinnati *Times-Star*, it is not true that even the wheat supply of the world cannot be cornered when Chicago undertakes it. Chicago has a way of undertaking enterprises for which there is no precedent. She herself has made many precedents. She may make another.

THE MARKETS.

We will be pleased to publish under this head short reviews of the conditions ruling in the different markets. Copy must reach us by the morning of the 14th of each month.

CLOVER SEED AT TOLEDO, March 13.—According to the report of the Secretary of the Toledo Produce Exchange clover seed was much more active and higher. On the call March sold at \$5.35@5.37½, closing at \$5.35. On the regular board March sold \$5.37½@5.40; cash at \$5.40; April at \$5.27½ to 5.30, and to \$5.27½; No. 2 Alsike at \$7.25; No. 2 at \$5.25@5.20, closing at \$5.22½.

HAY AT LOUISVILLE.—Callahan & Sons report the following as the condition of the hay market at Louisville, Ky., for the week ending March 10, 1894: No particular changes to note from last week. Receipts continue about equal to the demand. The inquiry is good for choice grades and the improvement in price, if any, is here most noticeable. Straight clover hay is dull, prices ranging as follows: Choice \$12.50; No. 1 \$11.00@12.00; No. 2 \$10.00@11.00; mixed \$9.00@10.00.

BARLEY AT CHICAGO, March 13.—H. Mueller & Co. report as follows: Since our last writing receipts of barley have been extremely light even for this time of the year, and prices have advanced on all grades, but mainly on the lower grades which were scarce, and the demand was mainly for the cheaper goods. Receipts are so light that a great many malt houses will no doubt soon be compelled to suspend operations for the season. We do not look for large offerings until after seeding time. The demand has been mainly of a local nature, as Eastern maltsters were pretty well supplied, and declined to pay the advance.

HAY AT CHICAGO.—M. M. Freeman & Co. report the receipts of hay at Chicago, Ill., on March 10 at 636 tons with shipments of 215 tons. **TIMOTHY.**—Quiet and easy, offerings moderate, demand light. No. 1 \$9.50@10.50; No. 2 \$8.00@9.00; mixed \$7.00@8.00. **PRAIRIE.**—Market liberally stocked, only choice Upland selling readily. Choice Iowa Upland \$7.00@7.75; good Iowa Upland \$6.25@6.75; good feeding hay \$5.00@6.00. **STRAW.**—Offerings for rye light, market firm at about \$7.00. Wheat and oat dull and from \$4.25@4.75. No marked improvement in market can yet be advised. With the breaking up of roads look for light receipts of hay and straw, and consequent better market and prices.

GRAIN REPORT OF J. & M. SCHWABACHER, LIMITED, New Orleans, La., March 6.—**TIMOTHY HAY.**—Arrivals of low grades have been heavy, and this description proves very slow sale. Good prime, strictly prime, and choice hay, however, are only in moderate supply, and find ready sale on arrival. We quoted choice at \$16.00@16.50; strictly prime \$15.50; good prime \$14.50@15.00; prime \$13.50@14.00; ordinary \$12.50@13.00 per ton. **PRAIRIE HAY.**—Is wanted, and bright green stock would command \$9.00 per ton. **CORN.**—Stocks are very low now, and quotations stiff, viz., No. 2 white 48 cents; yellow 47 cents; mixed 46 cents per bushel sacked. **OATS.**—In moderate supply and good inquiry at quotations as follows: No. 2 white 33@38½ cents; choice black mixed 37½@38 cents; No. 2 37@37½ cents; No. 3 36½ cents per bushel sacked. **WHEAT BRAN.**—Rules firm at 55 cents per 100 pounds for coarse. **CORN BRAN.**—Quiet at 62½ cents per 100 pounds. **CRACKED CORN.**—Quiet at \$5@57½ cents per 100 pounds for coarse.

CINCINNATI MARKETS, March 13.—Collins & Co. report the receipts of grain in Cincinnati to be quite small, and under a larger inquiry coupled with the advance in other markets, prices have assumed an upward tendency with the prospects of a still further improvement in corn and oats. Wheat is steady with the demand good for the few offerings, and the receipts are selling very readily. Hay is in good request for the top grades with the offerings of such small, and the lower grades are working off better than for some time past. Rye is very strong with the offerings not equal to the inquiry. No. 2 white shelled corn is quoted at 38½@39 cents; No. 2 mixed and yellow 38@39 cents, and the few receipts are selling quickly. **OATS.**—Mixed are not much offered, with No. 2 55 cents; No. 2 white 35½@36 cents; No. 3 white 34½@35 cents; and the market closed very firm. **RYE.**—Strong at 54@55 cents for No. 2; choice 55½@56 cents. **WHEAT.**—Steady at 57 cents for choice milling; No. 2 red 56@56½ cents; No. 3 red 55 cents. We look for considerable activity in the market for some time, as the stocks are small here, and seeding of nations will curtail the movement from points of supply.

GRAIN REPORT OF L. NORMAN & CO., LIMITED, London, England, Feb. 26, 1894.—Since our last report of January 22 the wheat trade has been less depressed, but no improvement in prices has been shown. To-day, however, the market is again weaker in tone, owing to the sharp decline in America, and buyers have mostly withdrawn. The United Kingdom stocks were drawn upon last week to the extent of 150,000 quarters, and a further reduction is expected during the present week. Russian and American wheats continue too dear, but the latter can be bought to-day for third less money. **HARD MAXITOBA.**—Quiet, with few buyers. During the week parcels on passage sold at 26-9@26-10½. To-day for shipment 36-1½ wanted. **HARD DELTIN.**—No transactions reported. Sellers for No. 1 for prompt shipment ask 27-3, but no buyers. **BARLEY.**—Malting barley neglected. Grinding sorts easier, and trade very dull. **OATS.**—Little or no inquiry, and prices nominally unaltered. **PEAS.**—Market quiet; quotations nominally unchanged. **LIVERPOOL** the turn cheaper. **GLASGOW** unchanged. **HAY.**—Quiet but steady. Near positions still firmly held at last week's rates. For February-March shipment sellers at £5 2 6 c. i. f. London. To Bristol buyers at £5 c. i. f.

When a shipper sits idly by and allows a chump of a congressman whom he possibly helped to elect, sacrifice the hay and grain interests of the country for a Canadian mess of potage, he may be considered a philanthropist in Canuck-land, but here in the United States he is his own worst enemy.—*Hay There.*

By holding wheat for the storage charges, more is being done to depress prices than was ever done by the Hatch bill. Had the elevators been merely public warehouses, as they ought to be, this wheat, which has laid like rich mince pies in the stomach of the market for three years, would all have been moved long before this.

VALUABLE BOOKS FOR GRAIN DEALERS.

The following standard works will be sent, postage paid, on receipt of prices given:

ROBINSON'S TELEGRAPH CIPHER.—The publishers have recently revised this excellent work, and we are now prepared to supply the trade. Cloth binding, \$1.50; leather.....\$2.00

WEIGH BOOKS.—Containing 125 perforated leaves with four weigh tickets and four stubs to each leaf, well printed upon good paper. The books are well bound. Copies will be mailed to any address for \$1.00

CLARK'S VEST-POCKET GRAIN TABLES.—A very useful and handy little book for grain buyers; to be used in reducing to bushels any quantity of grain or seeds up to 100,000 pounds. Size 2½ by 8½ inches, 16 pages. Leatherette.....\$3.50

KINGSLEY'S DIRECTORY is the only complete work containing the name and address of every firm engaged in the following lines of business: Milling, grain, flour and feed, hay and straw, butter and eggs, fruit and produce, malting, brewing, distilling and poultry. Over 500 pages, octavo, substantially bound in cloth. Indispensable to those who wish to reach the lines of business named above. Price.....\$3.50

TELEGRAPH CIPHER AND DIRECTORY TO NEW ENGLAND TRADE.—A new guide to carload buyers of grain throughout New England. A list of those engaged in the grain, feed and flour trade. Western grain shippers and millers wishing to do business in this territory will find this directory invaluable. The telegraph cipher has met with favor and is highly recommended by users. In fact the code part of the book is considered by many shippers superior to any other in use. It is modern and practical, a great money saver and will prevent mistakes. Nicely bound in leather,\$3.00

POUNDS TO BUSHELS.—These tables which show the number of bushels in any quantity from 20,000 to 70,000 pounds were compiled for the Chicago Grain Inspection Department. They are well printed on good paper and conveniently arranged for quickly finding the number of bushels in a carload. Each book contains ten leaves and each leaf is indexed at margin and printed on one side only. Each book is neatly bound in cloth. They will save clerks much labor and prevent errors in reduction. Price for "OATS," \$1.00; "BARLEY," \$1.00; "CORN AND RYE," \$1.00. The set.....\$2.50

ADAMS' CABLE CODEX.—This code is compiled especially for sending cablegrams and is used extensively in this country and abroad. The seventh edition, which is about to go to press, will contain 160 pages of cipher words, conveniently arranged. The code contains sentences covering and referring to buying and selling, condition of market, sterling money, United States money, business, financial matters, letters of credit, drafts, standing of firms and many sentences used by travelers. The cost of the code is a mere nothing compared with the saving which can be made on one message. Price, postpaid.....\$0.55

DAVIS GRAIN TABLES.—These tables give the value of any number of bushels of produce weighing 60 pounds to the bushel from 25 cents to \$1.25 per bushel, and the value of any produce weighing 32, 48 and 56 pounds to the bushel at 15 cents to \$1.50. The book also contains Davis' Dockage Table, which gives the amount to dock any load of wheat up to 600 bushels at 1½ to 5 pounds' dockage. The book contains 219 pages of tables, printed on good paper, with large type, and well bound in cloth. The book is a new publication, and the arrangement of the tables is much more convenient than in some of the old publications. Price.....\$1.25

CLARK'S GRAIN TABLES.—This work is published in several different forms, for use in different lines of business. In these tables pounds are reduced to bushels, so that a buyer can quickly determine the correct number of bushels in a load without doing any figuring. Their use effects a saving every day of more than time enough to pay for them. The edition intended principally for reducing team scale weights to bushels contains nine tables, and is bound in paper. Price 50 cents. This will be found invaluable to country buyers. A new edition, intended for shippers and commission merchants, reduces any quantity up to 61,000 pounds to bushels. It contains 16 tables, and is neatly bound in cloth. Price.....\$1.50

ROPP'S COMMERCIAL CALCULATOR.—A small manual in compact form which contains a new system of useful and convenient commercial tables. Also a "Practical Arithmetic for Practical Purposes" in which is embodied the shortest and simplest rules and methods known. It includes in its contents a table giving the value of cattle, hogs, flour, etc., for any amount ranging from 3 to 20,000 pounds, and in price from \$2 50 to \$6.75 per 100 pounds. It contains a table which shows the equivalent of English market quotations from 1 to 100 shillings in U. S. money. It also shows the freight on grain per bushel from 1 to 50 cents per 100 pounds. The grain tables show the number of bushels and odd pounds in any quantity of any kind of grain from 10 pounds to 100,000 pounds. The hay,

straw and coal tables shows the value in tons of any amount ranging from 10 to 3,000 pounds at prices from 25 cents to \$18 per ton. The interest tables are very complete and give the interest for any amount for any time and for any rate per cent, ranging from 6 per cent. to 10. The millers' and farmers' exchange table gives the number of pounds of flour to be received from wheat ranging from 5 to 3,000 pounds and from 25 to 40 pounds to the bushel. Tables of money weights and measures are also included, and also the metric system. The book contains much other useful information. Price.....\$0.50

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The Chicago, Milwaukee & St. Paul Railway Company's 6,150 miles of road traverses a vast territory, rich in all the resources that insure industrial success.

The industrial department is conversant with the iron, coal, lumber and tanbark, the water power (both river and artesian) for factory and electric power purposes, the markets, the transportation and financial facilities, and other interests on the line pertaining to industrial development, and disseminates information concerning same.

A number of new factories have been induced to locate—largely through the instrumentality of this company—at enterprising towns on its lines.

As the interest of the company is to secure the location of industries at places where the surroundings will insure their permanent success, the information furnished a particular industry is pertinent and reliable.

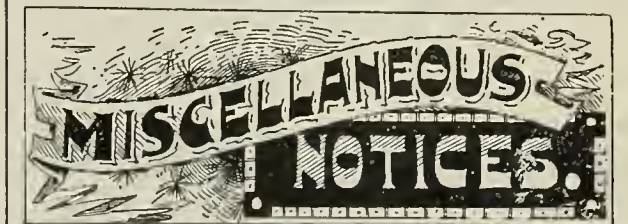
In the Eastern states, and in other parts of the world, factories are so congested and distant from the actual market as to result in fierce and destructive competition. That the West is taking a place as one of the great manufacturing territories of the world is forcibly impressing itself upon discerning and enterprising manufacturers. Steps should be taken by such while the field is as yet not fully covered, and while inducements are still being offered to locate in the West.

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For ordinary purposes two wires on a 14x18 perpetual bale is sufficient, but a bale having three wires looks better, sells better, and handles better, and not near so liable to burst, so that in taking all this into consideration, it is just as cheap to use three wires as two.



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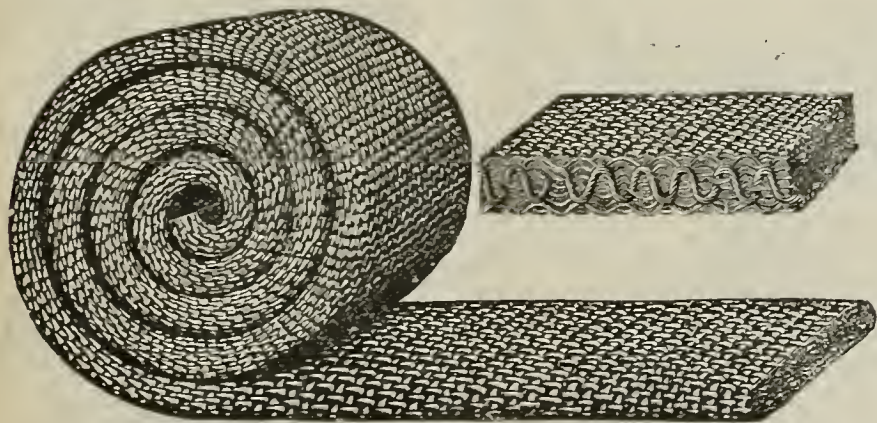
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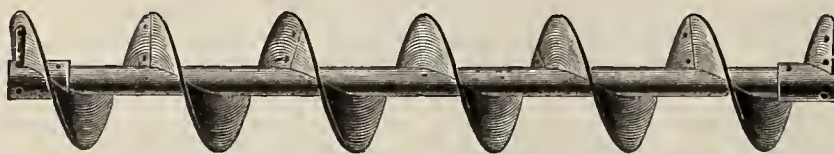
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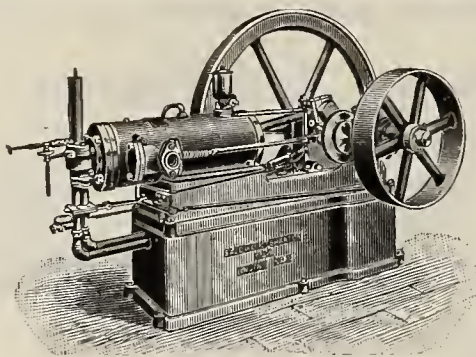
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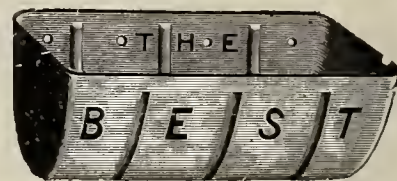
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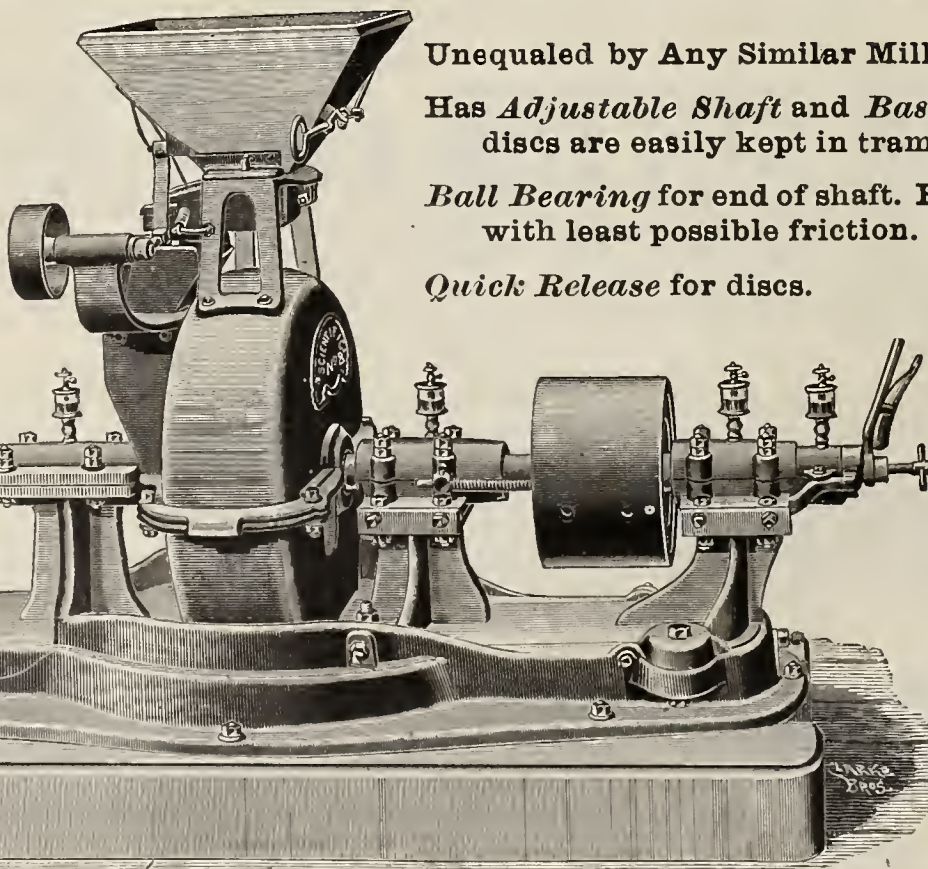
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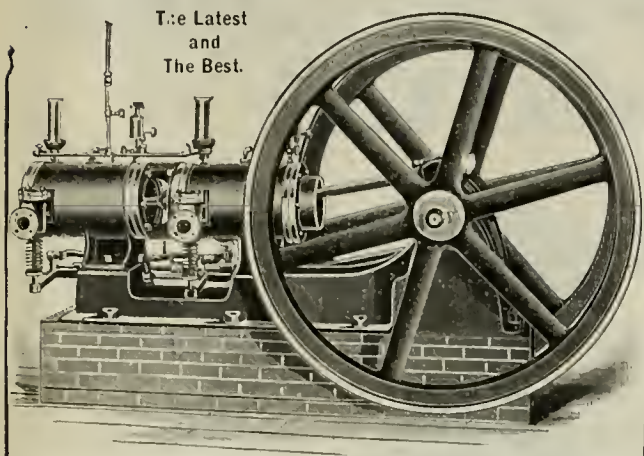
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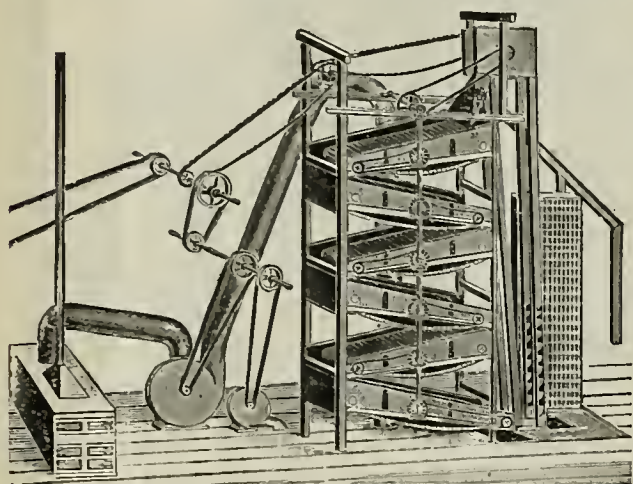
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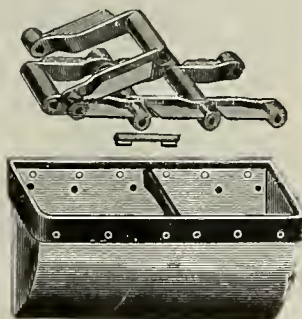
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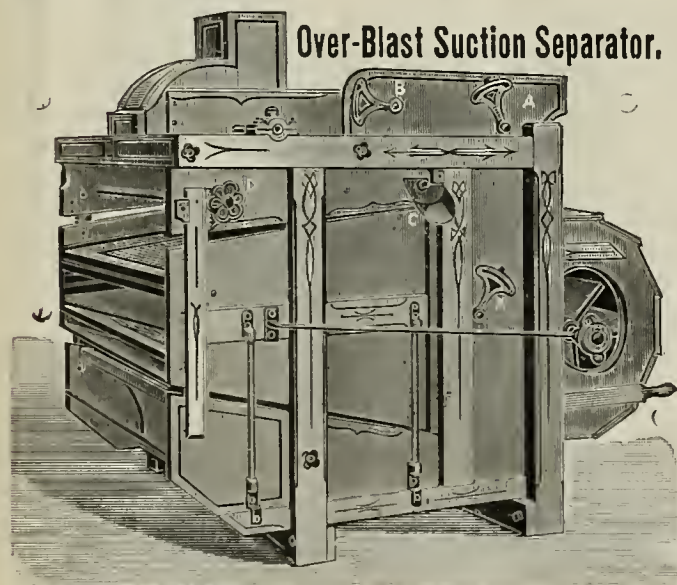


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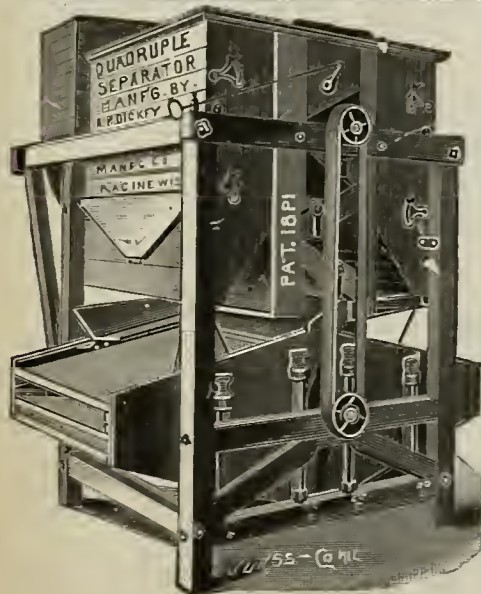
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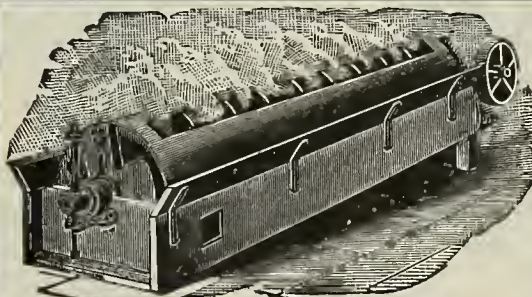
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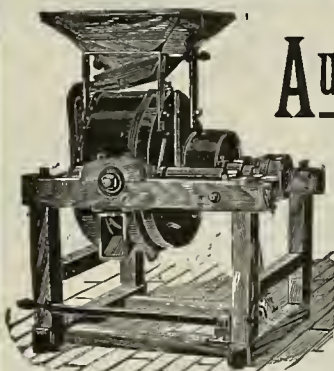


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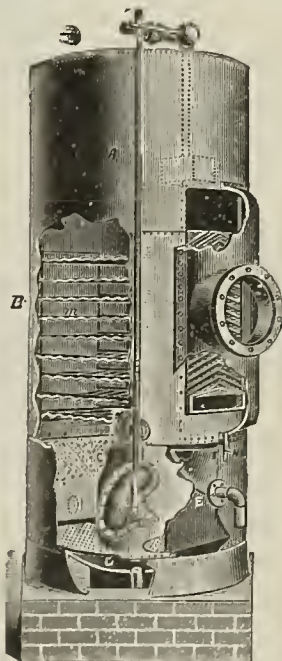
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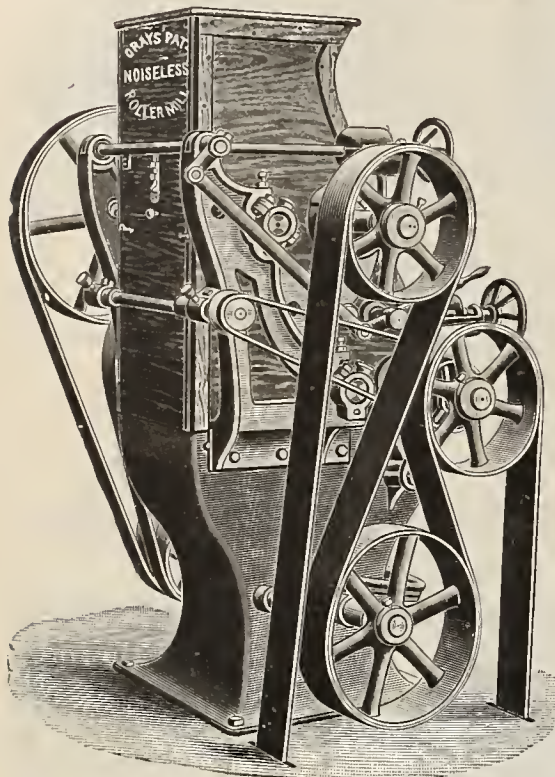
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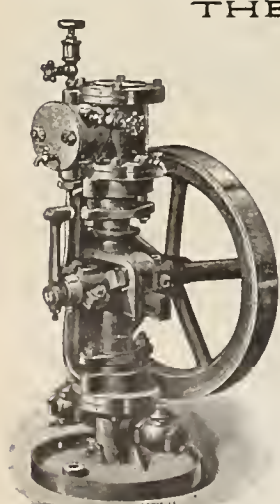
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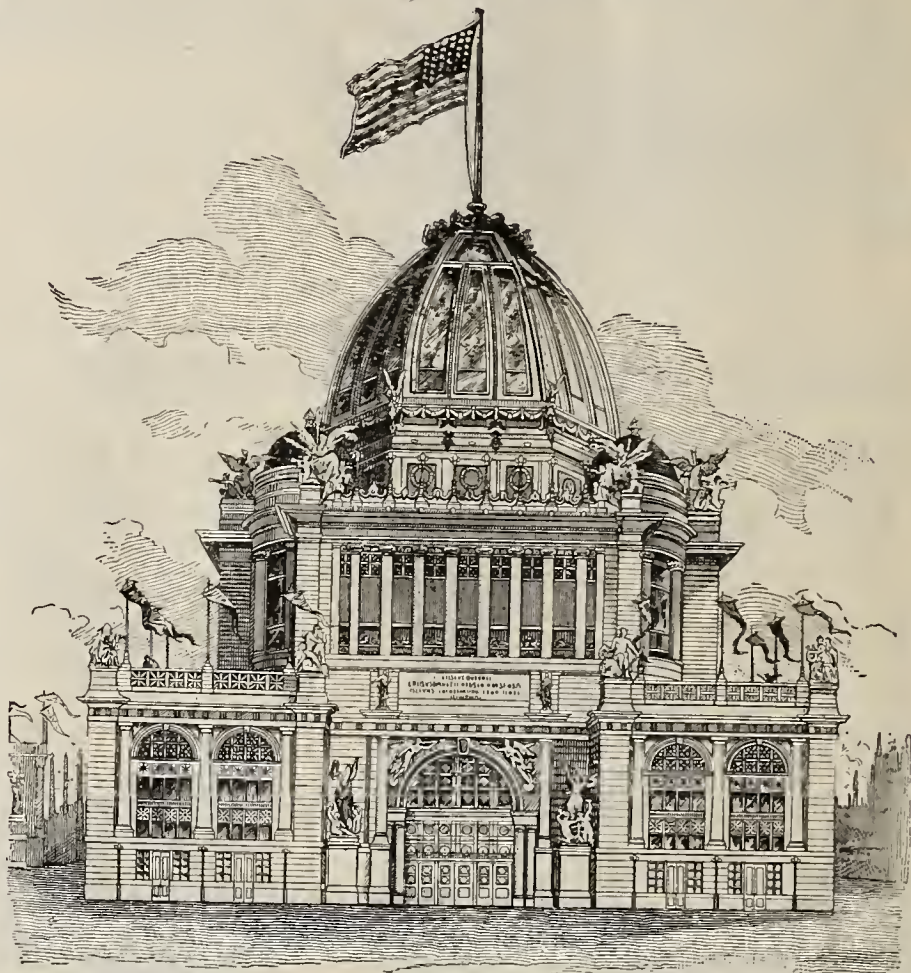
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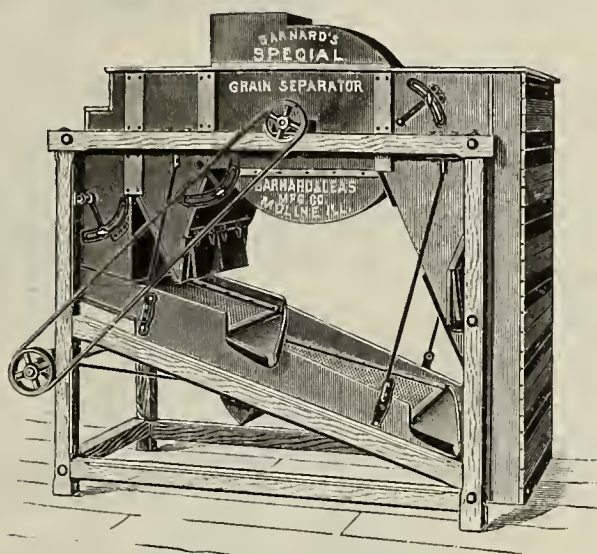
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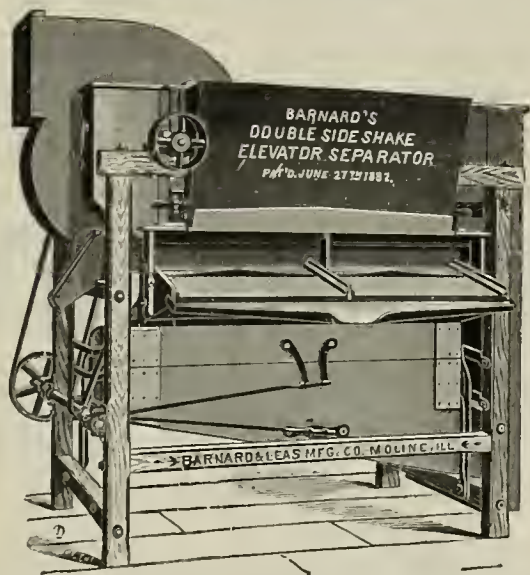
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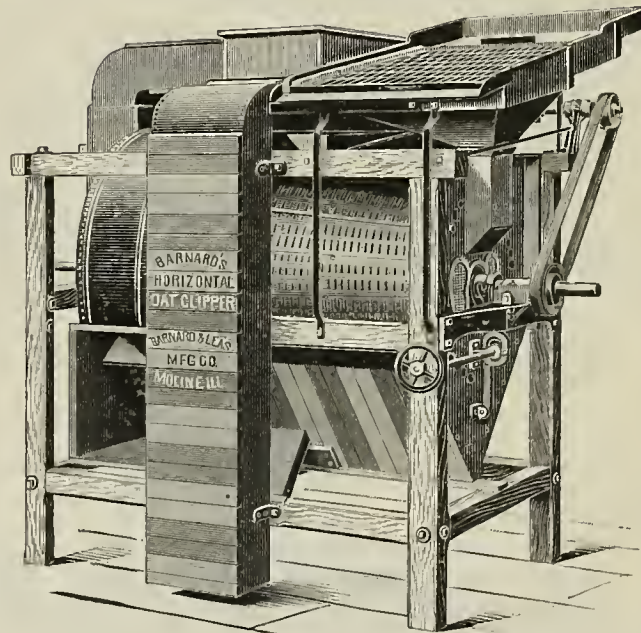


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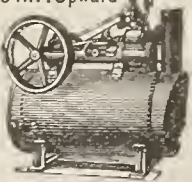
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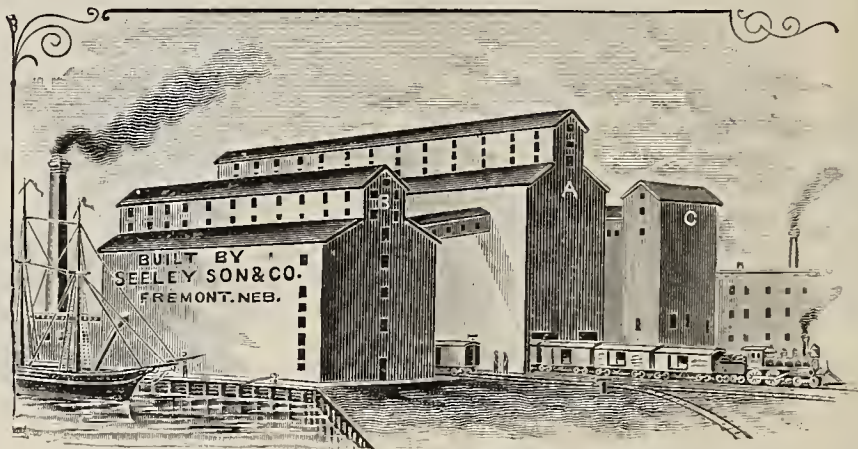
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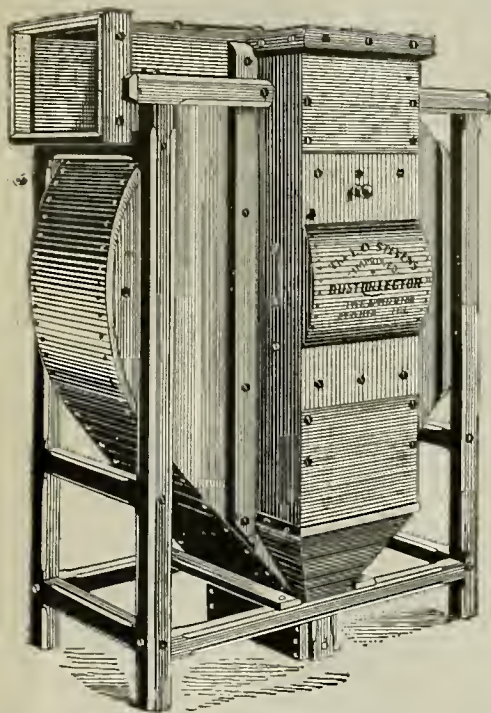
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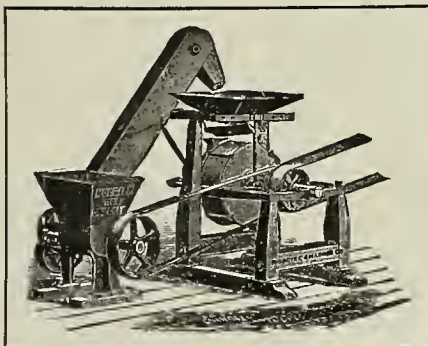
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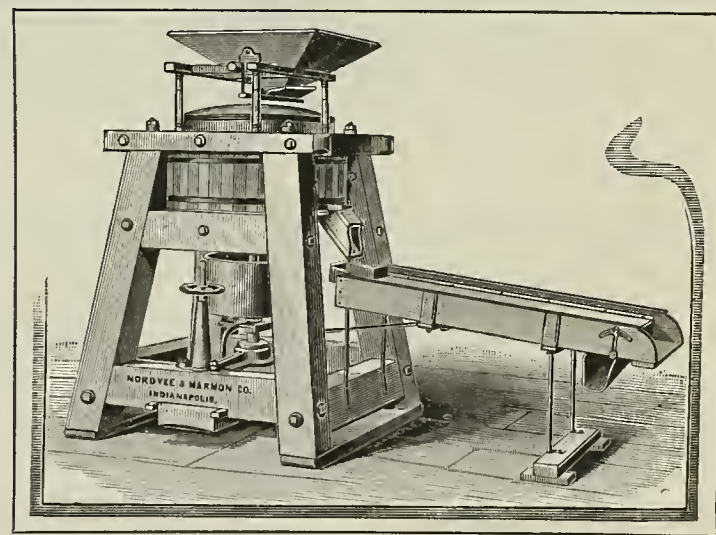
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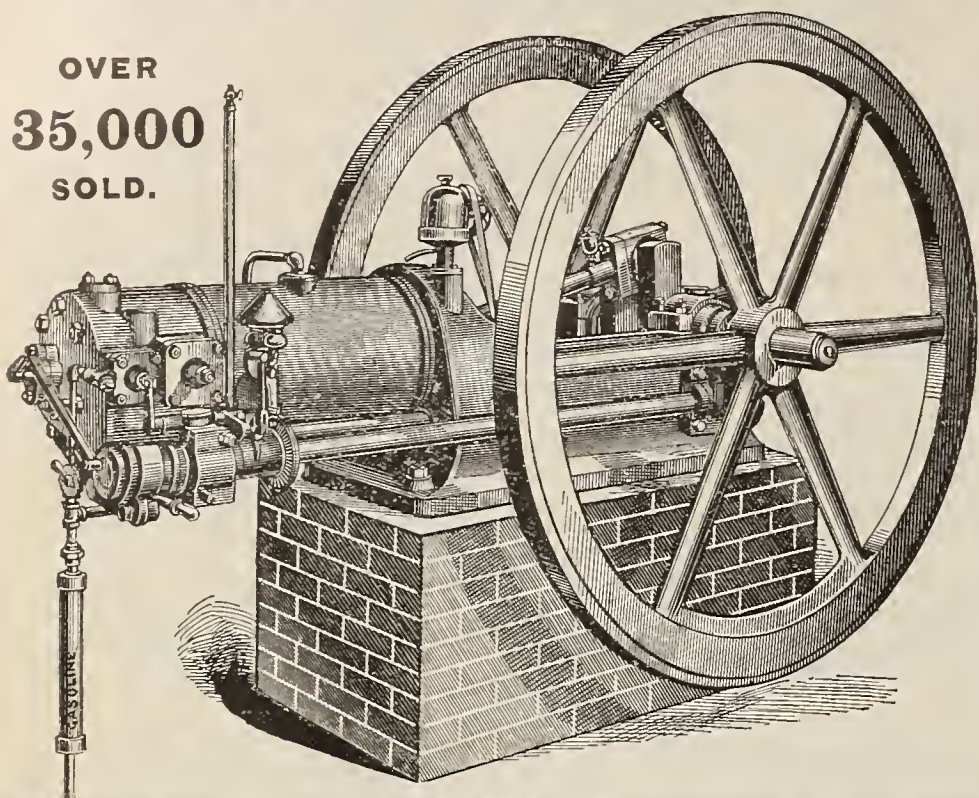
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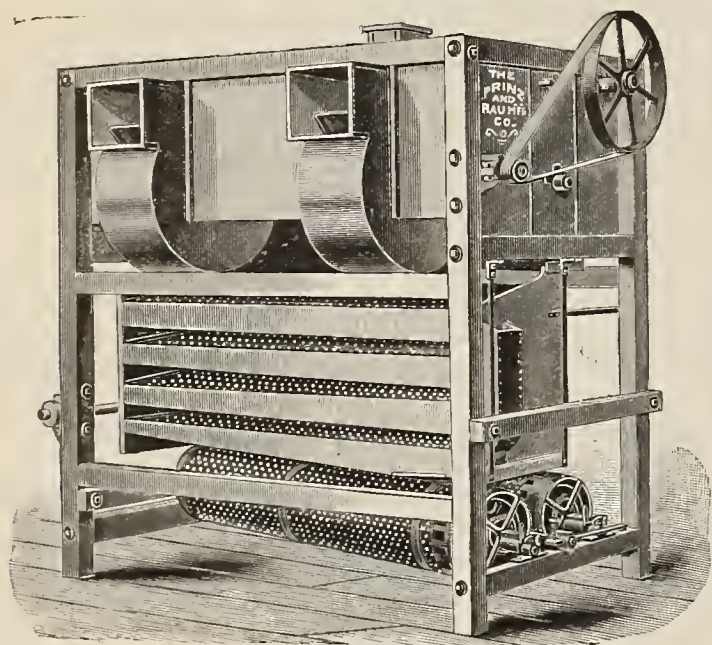
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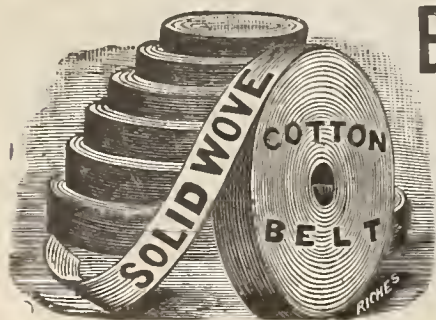
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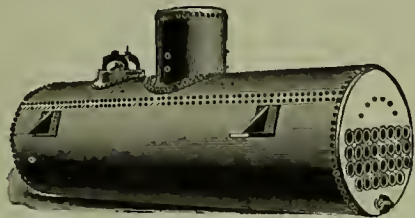
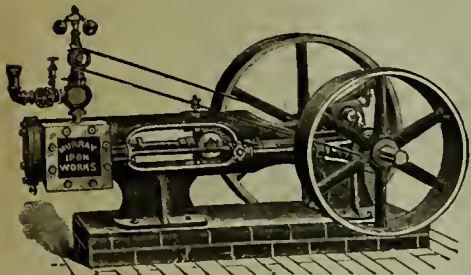
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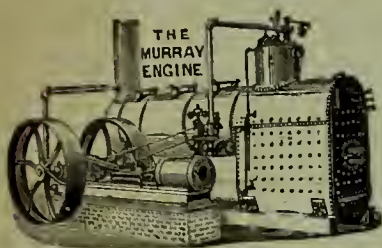
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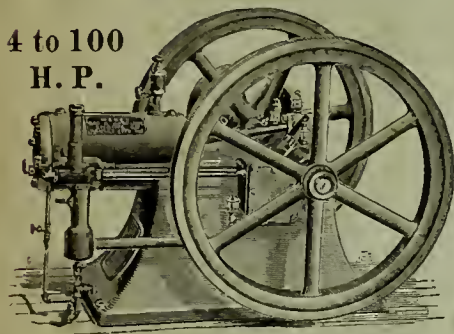
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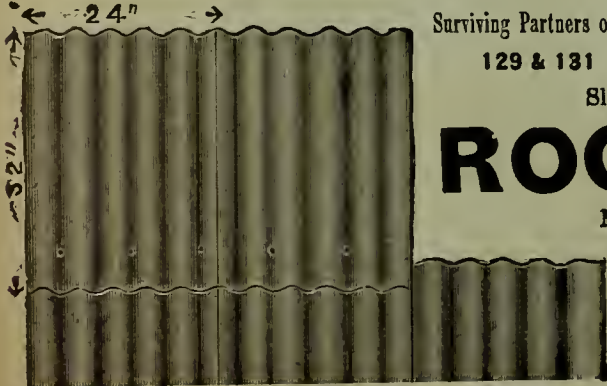
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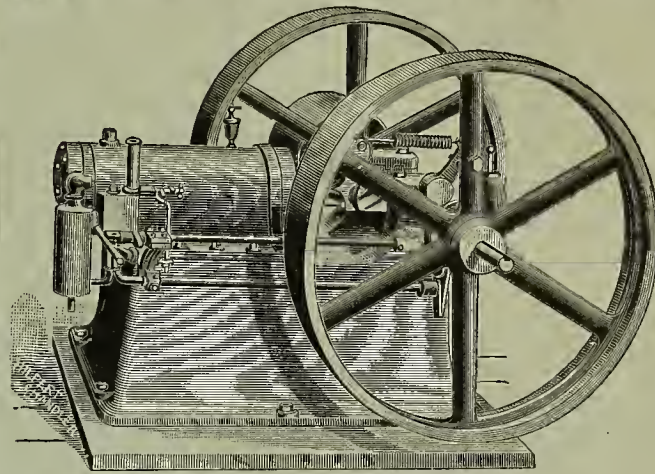
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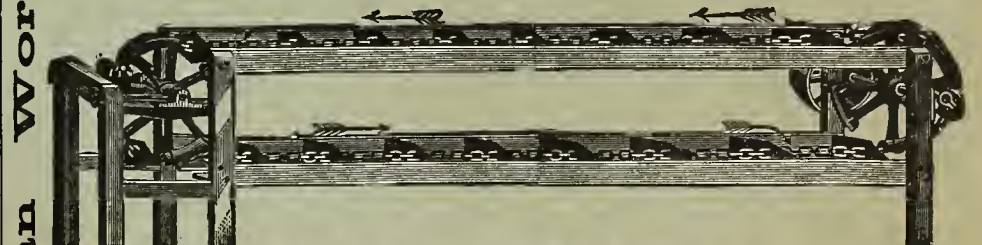
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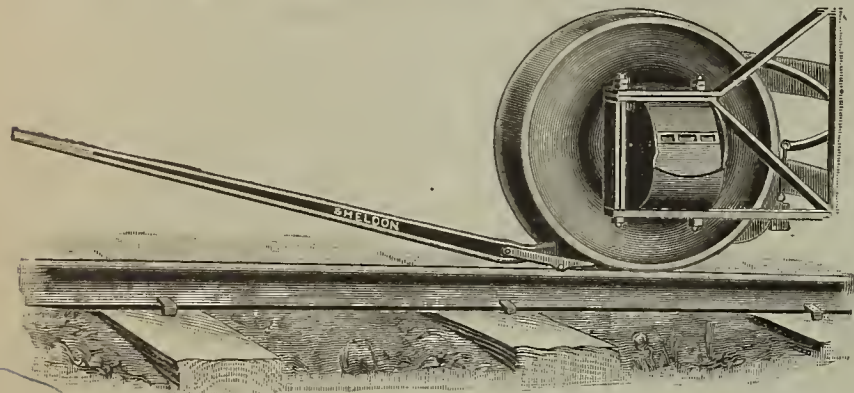
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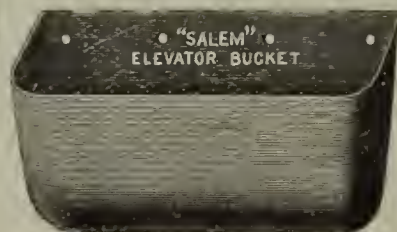
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